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Regulations and Non-Regulatory Revisions to State Implementation Plan: West Virginia

Atlantic Environmental Associates, Inc.
Waltham, MA

Prepared for

Environmental Protection Agency
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Regulations and Non-Regulatory Revisions to State Implementation Plan: West Virginia

By

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EPA Project Officer: Willis P. Beal

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16. ABSTRACT

This document has been produced in compliance with Section 110(h) of the Clean Air Act, as amended in 1977, which mandates periodic publication of State Implementation Plan (SIP) requirements. The first section of the document comprises the Federally approved SIP regulations. It consists of the EPA-approved State and/or local air pollution control regulations cited by reference in the Federal Register; regulations promulgated as of August 1, 1981 have been included in this document.

The present compilation constitutes an update of a previous documentation of regulations as of July 1, 1979. State and/or local air quality regulations which have not been Federally approved as of August 1, 1981, are not included. However, any omissions of regulations from this document in no way affects the ability of the respective Federal, State, or local agencies to enforce such regulations. A summary sheet of the regulatory revisions is provided to give a quick historical assessment of the changes.

The second part of the document contains the text of non-regulatory SIP revisions approved by EPA up to August 1, 1981, excluding notices or certifications of public hearings and technical support data. A complete tabulation of these revisions is also provided.

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This report has been reviewed by the Control Programs Development Division of the Office of Air Quality Planning and Standards, EPA, and approved for publication. Mention of trade names or commercial products is not intended to constitute endorsement or recommendation for use. Copies of the entire document are available for inspection and copying at EPA Headquarters (401 M Street SW, Washington, DC 20460), EPA's Office of Air Quality Planning and Standards (Room 826, 411 West Chapel Hill Street, Durham, NC 27701), and the appropriate EPA Regional Offices. Documents containing only the regulatory portions of each State Implementation Plan may be ordered for a nominal fee from the National Technical Information Services, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161.

PREFACE

This document has been produced in compliance with Section 110(h) of the Clean Air Act, as amended in 1977, which mandates periodic publication of State Implementation Plan (SIP) requirements. The first section of the document comprises the Federally approved SIP regulations. It consists of the EPA approved State and/or local air pollution control regulations cited by reference in the Federal Register; all regulations Federally promulgated as of August 1, 1981 have been included.

The present compilation constitutes an update of a previous documentation of regulations as of July 1, 1979.* State and/or local air quality regulations which have not been Federally approved as of August 1, 1981 are not included. However, any omissions of regulations from this document in no way affects the ability of the respective Federal, State or local agencies to enforce such regulations.

This document is not intended to provide a tool for determining the enforceability of any given regulation. Rather, it is intended to provide a comprehensive compilation of those regulations which are incorporated by reference into Title 40, Part 52, of the Code of Federal Regulations (CFR). The exclusion of a Federally approved regulation from this document does not diminish the enforceability of the regulation. Similarly, the inclusion of a given regulation in this document does not, in itself, render the regulation enforceable by either the State or EPA.

The regulations have been organized in this document according to the official State/local agency format. However, since State air quality regulations vary widely in their organization, content, and language, a standardized subject index has been added. The index listings consist of both pollutant and activity oriented categories to facilitate usage. For example, regulations which apply to copper smelters may be found under sulfur compounds (50.2), particulate matter process weight (50.1.1), or copper smelters (51.15). Federal regulations pertaining to a given State are not included herein but can be found under Title 40 Code of Federal Regulations, Part 52.

Additionally, a summary sheet of the regulatory revisions is included to provide a quick historical assessment of the changes. These summary sheets contain the date of submittal to EPA of each revision and the Federal Register publication date on which the revision was approved by EPA. A brief description of the regulation which was submitted is also included.

In accordance with the Act, the second part of the document contains non-regulatory SIP revisions approved by EPA up to August 1, 1981. All approved non-regulatory revisions listed under Identification of Plan in the CFR are included except notices or certifications of public hearings, and technical support data. Non-regulatory submittals which have only received EPA approval on selected elements are included in their entirety with an accompanying indication of the status of Federal actions on the non-approved elements. The non-regulatory revisions have been organized in this document according to the date of publication of EPA approval in the Federal Register. For historical completeness, a complete tabulation of these revisions is provided at the beginning of this second section.

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* Regulations and Non-Regulatory Revisions to State Implementation Plan: West Virginia, EPA-450/2-80-055, prepared under Contract 68-02-3388, July 31, 1980.

SUMMARY OF
EPA-APPROVED REGULATORY REVISIONS TO STATE OF WEST VIRGINIA SIP
BETWEEN JULY 1, 1979 AND JULY 31, 1981

Publication of Approval	Submittal Date	Page	Document Description
08/14/80	06/18/79	45FR54501	Revisions to Regulations VI, VII, XVII, XVIII.
08/14/80	12/19/79	45FR54501	Revised Regulations III and VIII, and new Regulations XXI, XXIII, and XXIV.
08/22/80	-	45FR56060	Correction of 11/09/78 Federal Register Notice clarifying a paragraph by adding Sections 2.11 through 2.16 and Section 3.01 which was inadvertently left out as contained in the preamble to EPA's approval of a SIP revision. No submittal.
11/10/80	01/25/78	45FR74480	Amended Sections 3.01(2) and 3.03(1) of Regulation X.
11/10/80	09/13/78	45FR74480	Amendment to Section 3.03.

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REGULATION II

TO PREVENT AND CONTROL PARTICULATE AIR POLLUTION FROM COMBUSTION OF FUEL IN INDIRECT HEAT EXCHANGERS

Section 1. Definitions.

1.01. "Air Pollution", 'statutory air pollution', shall have the meaning ascribed to it in Section Two of Chapter Sixteen, Article Twenty of the Code of West Virginia, as amended.

1.02. "Air Pollutants" shall mean solids, liquids, or gases which, if discharged into the air, may result in a statutory air pollution.

1.03. "Commission" shall mean the West Virginia Air Pollution Control Commission.

1.04. "Director" shall mean the Director of the West Virginia Air Pollution Control Commission.

1.05. "Person" shall mean any and all persons, natural or artificial, including any municipal, public or private corporation organized or existing under the laws of this or any other state or county, and any firm, partnership, or association of whatever nature.

1.06. "Fuel Burning Unit" shall mean and include any furnace, boiler apparatus, device, mechanism, stack, or structure used in the process of burning fuel or other combustible material for the primary purpose of producing heat or power by indirect heat transfer. For the purposes of this regulation, all fuel burning units are classified in the following categories:

(a) Type 'a' shall mean any fuel burning unit which has as its primary purpose the generation of steam or other vapor to produce electric power for sale.

(b) Type 'b' shall mean any fuel burning unit not classified as a Type 'a' of Type 'c' unit such as industrial pulverized fuel-fired furnaces, cyclone furnaces, gas-fired and liquid-fuel-fired units.

(c) Type 'c' shall mean any hand-fired or stoker-fired fuel burning unit not classified as a Type 'a' unit.

1.07. "Similar Unit(s)" shall mean all Type 'a', or all Type 'b', or all Type 'c' fuel burning units located at one plant.

1.08. "Fuel" shall mean any form of combustible matter (solid, liquid, vapor, or gas) that is used as a source of heat.

1.09. "Particulate Matter" shall mean any material except uncombined water that exists in a finely divided form as a liquid or solid.

1.10. "Smoke" shall mean small gasborne and airborne particulate matter arising from a process of combustion in sufficient number to be visible.

1.11. "Ringelmann Smoke Chart" shall be the Ringelmann's Scale for Grading the Density of Smoke published by the U.S. Bureau of Mines, or any chart, recorder, indicator, or device which is a standardized method for the measurement of smoke density which is approved by the Commission as the equivalent of said Ringelmann's Scale.

1.12. "Plant" shall mean and include all fuel burning units, source operations, equipment, and grounds utilized in an integral complex.

1.13. "Fugitive Particulate Matter" shall mean any and all particulate matter generated by any operation involving or associated with the combustion of fuel in fuel burning units which, if not confined, would be emitted directly into the open air from points other than a stack outlet.

1.14. "Fugitive Particulate Matter Control System" shall mean any equipment of method used to confine, collect, or dispose of fugitive particulate matter, including, but not limited to, hoods, bins, duct work, fans, and air pollution control equipment.

1.15. "Air Pollution Control Equipment" shall mean any equipment used for collecting or confining particulate matter for the purpose of preventing or reducing the emission of air pollutant into the open air.

1.16. "Stack", for the purposed of this regulation, shall mean, but not be limited to, any duct, control equipment exhaust, or similar apparatus, which vents gases and/or particulate matter into the open air.

1.17. "Kanawha Valley Air Basin" shall mean that area starting at the junction of the Gauley and New Rivers and terminating at the center of the Winfield Locks and extending a distance of three (3) statute miles, measured horizontally, with no reference to terrain, on each side of the center line of the Kanawha River.

Section 2. Emissions of Smoke and/or Particulate Matter Prohibited and Standards of Measurement.

2.01. Visible Emission Requirements for Fuel Burning Units Not Meeting the Requirements of Section 3, Weight Emission Standards.

No person shall cause, suffer, allow, or permit emission of smoke into the open air from any fuel burning unit which is in excess of the Ringelmann limitations specified in the following tables for the designated areas and time periods:

(a) From March 15, 1972, until September 1, 1972, smoke which is as dark as or darker than:

Areas of State	Installation Date of Fuel Burning Unit	Ringelmann Limitations on Fuel Burning Units
Kanawha Valley Air Basin	Before April 4, 1966 After April 4, 1966	2 1
All Other	NO LIMITATIONS	

(b) From September 1, 1972, until June 30, 1975, smoke which is as dark as or darker than:

Areas of State	Ringelmann Limitation of Fuel Burning Units
All	1

(c) After June 30, 1975, smoke which is darker than:

Areas of State	Ringelmann Limitation of Fuel Burning Units
All	0.5

2.02 The provisions of Sub-Section 2.01 of this section shall not apply to smoke emitted during the cleaning of a fire box or soot blowing the shade or appearance of which is less than the Ringelmann number specified in the following table, for a period or periods aggregating no more than eight (8) minutes per fuel burning unit in any eight (8) hour period:

Sub-Sections	Ringelmann Number
2.01 (a)	3
2.01 (b) and (c)	2

2.03. Visible Emission Requirements for Fuel Burning Units that Meet the Requirements of Section 3, Weight Emission Standards.

No person shall cause, suffer, allow, or permit emission of smoke into the open air from any fuel burning unit which is darker in shade or appearance than 0.5 Ringelmann or tem (10) percent opacity.

2.04. The provisions of Sub-Section 2.02 shall not apply to smoke emitted during the cleaning of a fire box or soot blowing the shade or appearance of which is less than No. 1 Ringlemann or twenty (20) percent opacity for a period or periods aggregating no more than eight (8) minutes per fuel burning unit for any eight (8)-hour period.

2.05. Realizing that with present technology the provisions of this section may, in some cases, be too restrictive to be applied to the building of a new fire in a fuel burning unit, the Commission may, upon specific application by the owner and/or operator of a fuel burning unit(s), grant exemptions to these provision. However, in no case shall these exemptions exceed the limitations set forth in the following table:

Type of Fuel Burning Unit	Exemptions Allowed For No More Than Two (2) Hours Per Start-Up Operation Shall Not be as Dark or Darker in Shade or Appearance as:
Type 'a' and Type 'b'	No. 2 Ringelmann
Type 'c'	(1) For forty-five (45) minutes No. 3 Ringelmann (2) For the remaining seventy-five minutes No. 2 Ringelmann

If such an exemption to the provisions of this section is desired, an application in writing shall be made to the Director. From time to time the Commission shall review such exemptions to determine if they are still warranted. If the Commission revises or terminates an exemption the owner and/or operator fo the affected fuel burning unit(s) shall be notified by certified mail. Such revisions or terminations shall not become effective for at least ninety (90) days after the receipt of notification by the owner and/or operator.

Section 3 Weight Emission Standards

3.01. (a) No person shall cause, suffer, allow, or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:

(1) For Type 'a' fuel furning units, the product of 0.05 and the total design heat inputs for such units in million British Thermal Units (B.T.U.'s) per hour, provided however that no more than 1200 pounds per hour of particulate matter shall be discharge into the open air from all such units;

(2) For Type 'b' fuel burning units, the product of 0.09 and the total design heat inputs for such units in million B.T.U.'s per hour, provided however that no more than 600 pounds per hour of particulate matter shall be

discharged into the open air from all such units; and

(3) For Type 'c' fuel burning units, in excess of the values listed in the following table, provided however that no more than 300 pounds per hour of particulate matter shall be discharged into the open air from all such units.

Table for Type 'c' Units	
Total Design Heat Input for all Type 'c' Fuel Burning Units Located at One Plant in Millions of B.T.U.'s Per Hour	Total Allowable Particulate Matter Emission Rate for All Type 'c' Fuel Burning Units Located at One Plant in Pounds Per Hour
10	3.4
20	5.6
40	9.0
60	11.7
80	14.4
100	16.6
200	26.4
400	42.2
600	54.0
3,333	300.0

For values between any two corresponding consecutive values listed in this table, linear interpolation is to be used for both columns.

(b) Subject to the provisions of this regulation, allowable emission rates for individual stacks shall be determined by the owner and/or operator and registered with the Commission at the request of, and on forms provided by, the Director. Such rates shall be subject to review and approval by the Director.

The approved set of individual stack allowable emission rates shall become an official part of the compliance schedule and/or any permits concerning such source(s), and shall not be changed without the prior written approval of the Director.

(c) If the number of similar fuel burning units located at one plant, each of which is meeting the requirements of this regulation, is expanded by the addition of a new unit(s), the total allowable emission rate for the new unit(s) shall be determined by the following formula. However, the maximum allowable emission rates given in Sub-Section 3.01(a) are not to be exceeded:

$$R_c = \left[1 \quad \left(\frac{H_{ct} \qquad R_{ct}}{H_{ct}} \right) \right] \quad H_c$$

Where,

R_c is the total allowable emission rate in pounds per hour for the new fuel burning unit(s);

H_{ct} is the total design heat input in million B.T.U.'s per hour of the existing and new similar units;

R_{ct} is the total allowable emission rate in pounds per hour corresponding to H_{ct}; and

H_c is the total design heat input in million B.T.U.'s per hour for the new fuel Burning unit(s).

3.02. Addition of Sulfur Oxides to Combustion Unit Exit Gas Stream.

No person shall cause, suffer, allow, or permit the addition of sulfur oxides to a combustion unit exit gas stream for the purpose of improving control equipment efficiency. Such action shall constitute a violation of this regulation.

3.03. The provision of Sub-Section 3.02 of this section shall not apply to combustion units in operation on the effective date of this regulation, September 1, 1974.

Section 4. Control of Fugitive Particulate Matter.

4.01. No person shall cause, suffer, allow, or permit any source of fugitive particulate matter to operate that is not equipped with a fugitive particulate matter control system. This system shall be operated and maintained in such a manner as to minimize the emission of fugitive particulate matter. Sources of fugitive particulate matter associated with fuel burning units shall include, but not be limited to, the following:

(a) Stockpiling of ash or fuel either in the open or in enclosures such as silos;

(b) Transport of ash in vehicles or on conveying systems, to include spillage, tracking, or blowing of particulate matter from or by such vehicles or equipment; and

(c) Ash or fuel handling systems and ash disposal areas.

Section 5. Registration.

5.01. Within thirty (30) days after the effective date of this regulation all persons owning and/or operating existing fuel burning units not previously registered shall have registered such units with the Commission. The information required for registration shall be determined and provided in the manner specified by the Director. Registration forms should be requested from the Director by the owner and/or operator of fuel burning unit(s) subject to the provisions of this section.

5.02. The owner and/or operator of fuel burning units that are under construction or on which construction is initiated within thirty (30) days after the effective date of this regulation shall register such fuel burning units within this thirty (30) day period.

Section 6. Permits.

6.01. After the effective date of this regulation, no person shall construct or modify any fuel burning unit without first obtaining a permit for such construction or modification. Applications for permits shall be made upon forms available from the Director and shall be filed no less than ninety (90) days prior to the construction or modification. These forms shall include such information as in the judgment of the Director will enable him to determine whether such source(s) will be so designed as to operate in conformance with the provisions of this regulation and the Code of West Virginia, and will not cause or contribute to the violation of Secondary Air Quality Standards. Within ninety (90) days of the receipt of an application the Director shall issue or deny such permit in accordance with the provisions of Section 2 of Chapter 16, Article 20, Paragraph 11b of the Code of West Virginia, as amended.

Section 7. Reports and Testing.

7.01. At such reasonable times as the Director may designate, the owner or operator of any fuel burning unit(s) may be required to conduct or have conducted tests to determine the compliance of such unit(s) with the emission limitations of Section 3. The Director, or his duly authorized representatve, may at his option witness or conduct such tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices.

Within a reasonable tolerance, the individual samples for such emission tests shall be extracted isokinetically, with the probe and filter media maintained at, or about, stack temperatures. Individual measurements shall be made at each of the various extraction points throughout the sampling plane in a manner that yields a composite sample and a distribution of measurements which are representative of the total stack gas flow and pollutant concentrations during the test.

The primary particulate sample collector shall be a preconditioned, fiberglass mat filter, certified as being at least ninety-nine (99) percent efficient in collecting 0.3 micron DOP (Dioctyl Phthalate) smoke, or a filter or equivalent properties and efficiency. The filter used shall be pre-weighed to at least one-tenth (0.1) of a milligram.

The total sample weight shall include both the particulate collected by the filter and the particulate obtained by appropriate cleaning of all devices preceding this filter in the sampling train. The total sample weight shall be determined to the nearest one-tenth (0.1) of a milligram.

Sufficient information on temperatures, velocities, pressures, weights, and dimensional values shall be reported to the Director, with such necessary commentary as he may require to allow an accurate evaluation of the reported test results and the conditions under which they were obtained.

7.02. The Director, or his duly authorized representative, may conduct such other tests as he may deem necessary to evaluate air pollution emissions other than those noted in Sub-Section 3.01.

7.03. The operators of fuel burning units shall submit data on operating schedules and the quality of fuel used in such units. Such data shall be reported in the manner the Director may specify, and will include, but not necessarily be limited to, information such as the number of start-ups, the quantity of fuel burned, and the ash, sulfur, moisture, volatile matter, and B.T.U. content.

7.04. Within a reasonable time prior to the start-up of a fuel burning unit(s), the owner and/or operator of such unit(s) shall notify the Director of the proposed start-up. If such prior notification is not practicable (e.g., if emergency conditions require prompt action, or if the requirement for the start-up and the start-up itself must necessarily occur, in time, outside the Commission's normal working hours) notification should be made within a reasonable time thereafter.

7.05. The Commission may publish, and from time to time revise, detailed test procedures and reporting instructions implementing the provisions of this section.

Section 8. Compliance Programs and Schedules.

8.01 In the event that a fuel burning unit(s) in existence prior to the adoption of this regulation does not meet the emission limitations, an acceptable program to fully comply with the regulation shall be developed and offered to the Commission by the person responsible for the plant. This program shall be submitted upon the request of, and within such time as shall be fixed by, the Commission. Once this program has been approved by the Commission, the owner and/or operator of such installation shall not be in violation of this regulation so long as the approved or amended program is observed. Compliance programs, schedules, and variances that have previously been issued by the Commission under Regulation II (1966) shall remain in effect until the expiration date of that compliance program, schedule, or variance.

8.02. In the event that an owner or operator of such a fuel burning unit(s) fails to submit a program or an acceptable program and schedule, the Commission shall, by order, determine the compliance program and schedule.

Section 9. Variance.

9.01. Due to unavoidable malfunction of equipment, emissions exceeding those provided for in this regulation may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Commission provided a corrective program has been submitted by the owner or operator and approved by the Cimmission.

9.02. For the purpose of preventing possible equipment damage during the start-up of a fuel burning unit(s), emissions exceeding those provided for in this regulation may be permitted by the Director for periods not to exceed twenty-four (24) hours, upon specific application to the Director no less than twenty-four (24) hours prior to the start-up operation.

Section 10. Exemptions.

10.01. All fuel burning units having a heat input under ten (10) million B.T.U.'s per hour will be exempt from Sections 3 through 8. However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date.

Section 11. Effective Date.

Regulation II (1974) shall become effective September 1, 1973, and shall supersede Regulation II (1972) which was adopted by the West Virginia Air Pollution Control Commission of the 26th day of January, 1972, and became effective March 15, 1972, and was filed with the Secretary of State January 31, 1972.

REGULATION III

TO PREVENT AND CONTROL AIR POLLUTION FROM THE OPERATION OF HOT MIX ASPHALT PLANTS.

Section 1. Definitions.

1.01. "Air Pollution", 'statutory air pollution' shall have the meaning ascribed to it in Section Two of Chapter Sixteen, Article Twenty of the Code of West Virginia, as amended.

1.02. "Commission" shall mean the West Virginia Air Pollution Control Commission.

1.03. "Director"shall mean the Director of the West Virginia Air Pollution Control Commission.

1.04. "Person" shall mean any and all persons, natural or artificial, including any municipal, public or private corporation organized or existing under the law of this or any other state or county and any firm, partnership, or association of whatever nature.

1.05. "Fuel Burning Equipment" shall mean and include any chamber, apparatus, device, mechanism, stack or structure used in the process of burning fuel or other combustible material for the primary purpose of producing heat for direct heat transfer as applied to an asphaltic hot mix plant excluding internal combustion engines.

1.06. "Fuel" shall mean any gaseous, liquid or solid substance or any combination thereof burned in fuel burning equipment.

1.07. "Plant" shall mean an 'asphaltic hot mix plant' which shall mean and include all the equipment utilized in the manufacture of asphaltic hot mix concrete, such as burner, drier, elevators, screens, mixer, weighing equipment, bins, air pollution control equipment, etc.

1.08. "Air Pollution Control Equipment" is defined as:

(a) Primary collection - That equipment such as cyclones or multicyclones incorporated for the collection of fine particulate material generated and emitted principally from the drying operation and from which all collected material may or may not be reinjected into the main aggregate flow.

(b) Secondary collection - That equipment such as multicyclones, scrubbers, bag filters, and electrostatic precipitators incorporated for the collection of that particulate material not collected by the primary collection equipment and from which such collected material may or may not be reinjected into the main aggregate flow.

1.09. "Smoke" shall mean small gasborne and airborne particles arising from a process of combustion in sufficient numbers to be visible.

1.10. "Particulate Matter" shall mean any material, except uncombined water, that exists in a finely divided form as a liquid or solid.

1.11. "Ringelmann Smoke Chart" shall be the Ringelmann's Scale for Grading the Density of Smoke published by the U.S. Bureau of Mines as information circular 7718, August, 1955, or any chart, recorder, indicator, or device which is a standardized method for the measurement of smoke density which is approved by the Commission as the equivalent of said Ringelmann Scale.

1.12 "Fugitive Particulate Matter" shall mean any and all particulate matter generated by the operation of an asphalt hot mix plant which, if not confined, would be emitted directly to the atmosphere from points other than the stack outlet.

1.13. "Particulate Matter Capture System" shall mean any equipment or method used to confine, collect, and transport particulate matter from elevators, screens, mixers, weighing equipment, bins, and other plant components to air pollution control equipment. Particulate matter capture systems shall include, but not be limited to hoods, bins, ductwork, enclosures and fans.

1.14. "Standard Conditions" for the purpose of this regulation shall mean a temperature of 68° F (20°C) and a pressure of 29.92 inches of mercury (760mm of HG).

1.15. "Opacity" shall mean the degree to which smoke and/or particulate matter emissions reduce the transmission of light and obscure the view of an object in the background.

Other words and phrases used in this regulation, unless otherwise indicated, shall have the meaning ascribed to them in Section Two of Chapter Sixteen, Article Twenty of the Code of West Virginia, 1931, as amended.

Section 2. Emission of Smoke and/or Particulate Matter Prohibited and Standards of Measurement - Visible.

2.01. No person shall cause, suffer, allow or permit emission of smoke into the open air from any fuel burning equipment which is as dark or darker in shade or appearance as that designated as No. 1 on the Ringelmann Smoke Chart or twenty percent (20%) opacity.

2.02. The provisions of Sub-Section 2.01 of this Section shall not apply to smoke and/or particulate matter emitted during the starting operation the shade or appearance of which is less than No. 3 on the Ringelmann Smoke Chart or sixty percent (60%) opacity for a period or periods aggregating no more than 4 minutes per start-up.

Section 3. Emission of Smoke and/or Particulate Matter Prohibited and Standards of Measurement - Weight Emissions

3.01. Total allowable emissions from all plants except as defined in Sub-Section 3.02 (a) and (b).

3.01. No person shall cause, suffer, allow or permit particulate emission from a plant into the open air in excess of the quantity as listed in the following table:

Aggregate Process Rate Pounds Per Hour	Stack Emission Rate Pounds Per Hour
10,000	10
20,000	16
30,000	22
40,000	28
50,000	31
100,000	33
200,000	37
300,000	40
400,000	43
500,000	47
600,000 & above	50

For a process weight between any two consecutive process weights stated in this table, the emission limitation shall be determined by interpolation.

3.02. No person shall cause, suffer, allow or permit particulate matter emissions to be discharged into the open air from any stack of a plant located in the following counties and magisterial districts in excess of 0.04 grains per dry standard cubic feet.

(a) Counties - Brooke, Hancock, Ohio, Marshall and Kanawha.

(b) Magisterial Districts - Valley (Fayette County), Scott and Pocatalico (Putnam County), Tygart (Wood County), Union and Winfield (Marion County), west of Interstate I-79).

3.03. In the case of more than one stack to a hot mix asphalt plant, the emission limitation of Sub-Section 3.01 of this Section will be based on the total emission from all stacks.

3.04. No person shall cause, suffer, allow or permit a plant to operate that is not equipped with a particulate matter capture system. This system shall be designed, operated, and maintained in such a manner as to prevent the emission of particulate matter from any point other than the stack outlet.

3.05. The owner or operator of the plant shall maintain control of fugitive particulate matter on plant premises and plant owned, leased, or controlled access roads by paving, oil treatment, or other suitable measures. Good operating practices shall be observed in relation to stockpiling,screen changing, and general maintenance to prevent fugitive particulate matter generation and atmospheric entrainment. Good operating practices, including water spraying or other suitable measures, shall be employed to minimize fugitive particulate matter generation and atmospheric entrainment when hot bins are pulled.

Section 4. Registration.

4.01. Within thirty (30) days after the effective date of this regulation, all persons operating asphalt hot mix plants within the state shall have registered with the Commission on forms to be made available by the Director, the name of the person, company or corporation operating the plant, the address, location, county, ownership (lessee & lessor), the principal officer of the company, and any other such reasonable information as the Director may require including by not necessarily limited to capacity of the plant, type of fuel used, plant operating schedule, description of rotary drier, height and size of stack and description of particulate matter control equipment.

4.02. When such plants are modified by changes in burner design, heating fuel, fan capacity, drier design, air pollution control equipment, stack parameters, or like changes which significantly affect the emission characteristics of the plants then they shall be re-registered with the Director defining those changes within thirty (30) days after being placed in operation.

Section 5. Permits.

5.01. An operating permit will be granted for plants in existence on the effective date of this regulation provided they meet and maintain the requirements as set forth in this regulation. These permits will be valid for one calendar year and must be renewed annually. Any person failing to maintain the requirements of this regulation shall, at the discretion of the Commission, have their operating permit revoked.

5.02 When operating permits are revoked, the Director will consider reissuing permits when such changes as necessary to meet the requirements of this regulation are made by the owner or operator of the plants.

5.03 No person shall construct, modify, or relocate any plant without first obtaining a permit in accordance with the provisions of Section Two of Chapter Sixteen, Article Twenty, Paragraph 11b of the Code of West Virginia, as amended, and Regulation XIII of this agency. A new, modified, or relocated plant that meets the requirements of these regulations will also be issued an operating permit by the Director for the same calendar year that the permit to construct, modify, or relocate is issued.

5.04 Plants operating without a permit will be in violation of this regulation.

Section 6. Reports and Testing

6.01 At such reasonable times as the Director may designate, the operator of any asphalt hot mix plant may be required to conduct or have conducted certification stack tests and other stack tests to determine the particulate matter concentration in exhaust gases when the Director has reason to believe, based on observed violations, that the stack emission limitation(s) is/are violated. Such tests shall be conducted in accordance with this agency's TP-5 "Determination of Particulate Emissions from Stationary Sources", or as the Director may specify and be filed on forms and in a manner acceptable to the Director. Such tests shall be conducted under such reasonable operation conditions as the Director may specify. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices.

6.02. At such time as the Director may request, the operator of the plant will submit data including, but not limited to, on type, sizing, and quantity of the aggregate used and the hours of operation.

6.03 Any stack serving a hot mix asphalt plant shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.

Section 7. Delayed Compliance Order.

7.01 The owner or operator of any plant which is in existence prior to the effective date of this regulation which does not meet the emission limitations of this regulation shall develop and submit to the Commission, within such time as shall be allowed by the Commission, an acceptable control program for the attaining and maintaining of the emission limitations of this regulation. The control program shall be embodied in a consent order as provided in Section Five of Chapter Sixteen, Article Twenty, Paragraph 17 of the Code of West Virginia, as amended.

7.02 In the event that an owner or operator of such a plant fails to submit an acceptable control program within the time allowed, the Commission shall, by final order, determine a reasonable control program for the attaining and maintaining of the emission limitations of this regulation for such plant.

Section 8. Variance.

Due to unavoidable malfunctions of equipment, emissions exceeding those provided for in this regulation may be permitted by the Commission for periods not to exceed 2 days upon specific application to the Director. Such application shall be made within 24 hours of the malfunction or within such other time period as the Director may specify. When parts are not available for repair the Commission may grant an extension of time for a period longer than 2 days, but not to exceed 10 days.

Section 9. Circumvention

No owner or operator subject to the provisions of this regulation shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

Section 10. Effective Date

Regulation Series III (1966) was amended by the Commission on the 23rd day of February, 1979, and shall become effective the 27th day of October, 1979. Regulation Series III (1966), as amended, shall henceforth be cited as Regulation Series III (1979). Regulation Series III (1966) was adopted by the Commission on the 22nd day of August, 1966, and became effective the 1st day of October, 1966.

REGULATION V

TO PREVENT AND CONTROL AIR POLLUTION FROM THE OPERATION OF COAL PREPARATION PLANTS AND COAL HANDLING OPERATIONS.

Section 1. Definitions.

1.01. "Air Pollution", "statutory air pollution' shall have the meaning ascribed to it in Chapter Sixteen, Article Twenty, Section Two of the Code of West Virginia, as amended.

1.02. "Commission" shall mean the West Virginia Air Pollution Control Commission.

1.03. "Person" shall mean any and all persons, natural or artificial, including any municipal, public or private corporation organized or existing under the law of this or any other state or county and any firm, partnership, or association of whatever nature.

1.04. "Handling Operation" shall mean and include but not be limited to all coal grinding, crushing, picking, screening, conveying, storing, and stockpiling operations associated with the transport, production, or preparation of coal or coal refuse, excluding coal washing, drying, or air separation operations.

1.05. "Coal Preparation" shall mean and include but not be limited to all coal washing, drying or air separation operations used for the purpose of preparing the product for marketing.

1.06. "Plant" shall mean and include all equipment and grounds utilized in an integral complex for coal preparation and associated handling.

1.07. "Fuel" shall mean a fuel such as a solid, gaseous or liquid fuel which is fired in fuel burning equipment.

1.08. "Fuel Burning Equipment" shall mean and include any chamber, apparatus, device, mechanism, stack or structure used in the process of burning fuel for the primary purpose of reducing the moisture content of coal.

1.09. "Thermal Drier" shall mean a device using fuel burning equipment for the primary purpose of reducing the moisture content of coal.

1.10. "Air Table" shall mean a device using a gaseous separating media for the primary purpose of improving the product quality.

1.11. "Air Pollution Control Equipment" shall mean any equipment used for collecting gasborne particulate matter for the purpose of preventing or reducing particulate emissions into the open air.

1.12. "Standard Cubic Foot" - One cubic foot of dry gas, measured at standard conditions of 60°F and 29.92 inches of mercury column.

1.13. "Stack" - For the purpose of this Regulation shall mean but not be limited to any duct, control equipment exhaust, or similar apparatus, which vents gases containing particulate matter into the open air.

1.14. "Particulate Matter" shall mean any material except uncombined water, that exists in a finely divided form as a liquid or solid.

1.15. "Smoke" shall mean small gasborne and airborne particles emitted from a stack in sufficient numbers to be visible.

1.16. "Ringelmann Smoke Chart" - Shall be the Ringelmann's Scale for Grading the Density of Smoke published by the U. S. Bureau of Mines as information circular 7718, August, 1955, or any chart, recorder, indicator, device, or method which is a standardized method for the measurement of smoke density which is approved by the Commission as the equivalent of said Ringelmann Scale.

1.17. "Fugitive Dust" shall mean any and all particulate matter generated, which, if not confined, would be emitted directly into the open air from points other than a stack outlet.

1.18. "Fugitive Dust Control System" shall mean any equipment or method used to confine, collect, and dispose of fugitive dust, including but not limited to hoods, bins, duct work, fans, and air pollution control equipment.

Other words and phrased used in this Regulation, unless otherwise indicated, shall have the meaning ascribed to them in Chapter Sixteen, Article Twenty, Section Two of Code of West Virginia, 1931, as amended.

Section 2. Emission of Smoke Prohibited and Standards of Measurement.

2.01. No person shall cause, suffer, allow or permit emission of smoke into the open air from any stack which is as dark or darker in shade or appearance as that designated as No. 1 on the Ringelmann Smoke Chart.

2.02. The provisions of Sub-Section 2.01 of this Section shall not apply to smoke, the shade or appearance of which is less than No. 3 on the Ringelmann Smoke Chart for a period or periods aggregating no more than 5 minutes in any 60-minute period during operation.

2.03. The provisions of Sub-Section 2.01 and 2.02 of this Section shall not apply to smoke, the shade or appearance of which is less than No. 3 on the Ringelmann Smoke Chart for a period of up to 8 minutes in any operating day for the purposes of building a fire of operating quality in the fuel burning equipment of a thermal drier.

2.04. The equivalent opacity of those Ringelmann numbers in Sub-Section 2.01 and Sub-Section 2.02 of this Section shall be used as a guide in the enforcement of Section 3 and Section 4 of this Regulation.

2.05. No person shall cause, suffer, allow or permit emission of smoke into the open air from any fugitive dust control system which is as dark or darker in shade or appearance as that designated as No.1 on the Ringelmann Smoke Chart or the equivalent opacity of this Ringlemann number.

Section 3. Control and Prohibition of Particulate Emissions From Coal Thermal Drying Operations of a Coal Preparation Plant.

No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any thermal drier exhaust in excess of the following limitations:

3.01. Until September 2, 1971, thermal driers installed on or before March 1, 1970, shall not emit more than 0.15 grains of particulate matter per standard cubic foot of exhaust gas.

3.02. After September 1, 1971, thermal driers installed on or before March 1, 1970, shall not exceed the emission limitations of following table:

Total Plant Volumetric Flow Rate (Standard Cubic Feet Per Minute)	Maximum Allowable Particulate Loading Per Drier (Grains Per Standard Cubic Foot)
120,000 or less	0.12
172,000	0.11
245,000	0.10
351,000	0.09
500,000 & above	0.08

3.03. Thermal driers installed after March 1, 1970, shall not exceed the emission limitations of the following table:

Total Plant Volumetric Flow Rate (Standard Cubic Feet Per Minute)	Maximum Allowable Particulate Loading Per Drier (Grains Per Standard Cubic Foot)
75,000 or less	0.10
111,000	0.09
163,000	0.08
240,000 & above	0.07

3.04. For the volumetric flow rate between any two consecutive volumetric flow rates stated in Sub-Section 3.02 and Sub-Section 3.03, limitations shall be as determined by linear interpolation. For the purpose hereof, the total volumetric flow rate shall be the total standard cubic feet of dry gas passed through all thermal driers at one plant location. This value shall be determined by methods which are acceptable to the Commission.

3.05. When modifications are made to plants after March 1, 1970, that result in a significant increase in the total gas volume passing through a thermal drier, said drier(s) will be subject to the emission limitations of Sub-Section 3.03 even though such modifications do not include the installation of a new thermal drier(s).

3.06. No person shall circumvent this Regulation by adding additional gas to any drier exhaust or group of drier exhausts for the purpose of reducing the grain loading.

3.07. No person shall cause, suffer, allow or permit the exhaust gases from a thermal drier to be vented into the open air at an altitude of less than 80 feet above the foundation grade of the structure containing the drier or less than 10 feet above the top of said structure or any adjacent structure, whichever is greater.

In determining the desirable height of the above stack, due consideration shall be given to the local topography, meteorology, the location of nearby dwellings and public roads, and the stack emission rate.

3.08. Any stack venting thermal drier exhaust gases into the open air shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.

Section 4. Control and Prohibitions of Particulate Emissions From an Air Table Operation of a Coal Preparation Plant.

4.01. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any air table exhaust in excess of 0.05 grains per standard cubic foot of exhaust gases.

4.02. No person shall circumvent this Regulation by adding additional gas to any air table exhaust or group of air table exhausts for the purpose of reducing the grain loading.

4.03. Any stack venting air table exhaust gases into the open air shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.

Section 5. Control and Prohibitions of Fugitive Dust Emissions From Coal Handling Operations and Preparation Plants.

5.01. No person shall cause, suffer, allow or permit a plant or handling operation to operate that is not equipped with a fugitive dust control system. This system shall be operated and maintained in such a manner as to minimize the emission of particulate matter into the open air.

5.02. The owner or operator of the plant or handling operation shall maintain dust control of the premises and owned, leased, or controlled access roads by paving, or other suitable measures. Good operating practices shall be observed in relation to stockpiling, car loading, breaking, screening, and general maintenance to minimize dust generation and atmospheric entrainment.

Section 6. Registration.

6.01. Within thirty (30) days after the effective date of this Regulation, all persons owning and/or operating coal preparation plants within the State shall have registered with the Commission on forms to be made available by the Commission, the name of the person, company or corporation operating the plant, the address, location, county, ownership (lessee & lessor), the principal officer of the company, and any other such reasonable information as the Commission may require, including, but not necessarily limited to, capacity of the plant, type of fuel used, plant operating schedule, description and capacities of thermal driers and air tables, height and size of stacks and air pollution control equipment.

6.02. Persons operating registered plants which are to be modified by changes in fuel burning equipment, fuel, fan capacity, drier design, air pollution control equipment, air tables, stacks or like changes which could significantly affect the emission characteristics of the plants shall file with the Commission those proposed changes not less than thirty (30) days before such changes are made.

6.03. Within thirty (30) days after the completion of the modifications as filed under Sub-Section 6.02, the operator shall register such changes with the Commission of forms to be made available by the Commission.

6.04. Not later than sixty (60) days prior to operation, new plants shall be registered by the owner and/or operator of such plants. Such registration shall be made on forms to be made available by the Commission and will include the name of the person, company, or ownership (lessee & lessor), the principal officer of the company, and any other such reasonable information as the Commission may require including, but not necessarily limited to, data on the capacity of the plant, type of fuel to be used, description and capacities of thermal driers and air tables, height and size of stacks and description of air pollution control equipment.

Section 7. Permits.

7.01. Plants in existence on the effective date of this Regulation will be granted temporary operating permits subject to compliance with Sub-Section 6.01. These permits will be valid for as long as the Commission shall designate. When it is determined by theCommission that a plant meets the requirements of the Regulation, the temporary permit will be replaced with an operating permit.

7.02. Any plant failing to maintain the requirements of this Regulation shall, at the discretion of the Commission, have the permit revoked.

7.03. When permits are revoked, the Commission will reissue permits when such changes as necessary to meet the requirements of this Regulation are made.

7.04. New plants will be granted temporary operating permits provided they comply with Sub-Section 6.04.

7.05. Subject to the provisions of Sub-Section 6.01, plants operating without a permit will be in violation of this Regulation.

7.06. The possession of a permit by any person shall in no way relieve the holder thereof of his obligation to comply with the provision of this Regulation.

Section 8. Reports and Testing.

8.01. At such reasonable time as the Director may designate, the operator of a coal preparation plant may be required to conduct or have conducted stack tests to determine the dust loading in exhaust gases when the Director has reason to believe that the stack emission limitation is being violated. Such tests shall be conducted in such manner as the Director may specify and be filed on forms, and in a manner, acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings, ladders, etc., to comply with generally accepted good safety practices.

8.02. The Director, or his duly authorized representative, may conduct such other tests as he may deem necessary to evaluate air pollution emissions other than those noted in Sub-Section 8.01.

Section 9. Variance.

9.01. If a plant operating under a temporary permit does not meet the requirements of this Regulation, the operator of this plant shall develop and submit to the Commission an acceptable control program to meet these requirements. This control program shall be submitted upon the request of and within such time as shall be fixed by the Commission, and after said program has been approved by the Commission, the owner or operator of the plant will not be in violation of this Regulation as long as said program is observed.

9.02. Due to unavoidable malfunctions of equipment or non-availability of repair parts, emissions exceeding those provided for in this Regulation may be permitted by the Commission upon specific application to the Commission. Such application shall be made within 24 hours of the malfunction within such other period as the Commission may specify.

Section 10. Effective Date.

Regulation V shall become effective September 1, 1968.

REGULATION VI

TO PREVENT AND CONTROL AIR POLLUTION FROM COMBUSTION OF REFUSE.

Section 1. Intent and Purpose.

1.01. Neither compliance with the provisions of this Regulation nor the absence of specific language to cover particular situations constitutes approval or implies consent or condonement of any emission which is released in any locality in such manner or amount as to cause or contribute to undesirable levels of air contaminants. Neither does it exempt nor excuse anyone from complying with other applicable laws, ordinances, regulations or orders of governmental entities having jurisdiction.

1.02. All persons engaged in any form of combustion of refuse shall give careful consideration to the effects of the resultant emissions on the air quality of the area(s) affected by such burning. Important considerations include but are not limited to the location and time of burning, the type of material being burned and the potential emissions and the prevailing meteorological conditions. Persons failing to give due consideration to these factors will be in violation of this Regulation.

1.03. It is the intent of the Commission that all incorporated areas and other local governmental entities prohibit open burning and develop alternative methods for disposal of waste material. If such action is not taken in any air basin, air quality control region or other such areas as the Commission may designate, then such action may be taken by the Commission to insure compliance with air quality standards.

Section 2. Definitions.

2.01. "Air Pollution", 'statutory air pollution' shall have the meaning ascribed to it in Chapter Sixteen, Article Twenty, Section Two of the Code of West Virginia, as amended.

2.02. "Commission" shall mean the West Virginia Air Pollution Control Commission.

2.03. "Person" shall mean any and all persons, natural or artificial, including any municipal, public or private corporation organized or existing under the law of this or any other state or country, and any firm, partnership or association of whatever nature.

2.04. "Particulate Matter" shall mean any material, except uncombined water, that exists in a finely divided form as a liquid or solid.

2.05. "Smoke" shall mean small gasborne and airborne particles emitted as the result of the combustion of refuse in sufficient numbers to be visible.

2.06. "Ringelmann Smoke Chart" shall mean the Ringelmann's Scale for Grading the Density of Smoke, published by the U. S. Bureau of Mines, or any chart, recorder, indicator, device or method which is a standardized method for the measurement of smoke density and is approved by the Commission as the equivalent of said Ringelmann Chart.

2.07. "Air Pollution Control Equipment" shall mean any equipment used for collecting or converting gasborne particulate or gaseous materials for the purpose of preventing or reducing emission of these materials into the open air.

2.08. "Incineration" shall mean the destruction of combustible refuse by burning in a furnace designed for that purpose. For the purposes of this Regulation, the destruction of any combustible liquid or gaseous material by burning in a flare/flare stack shall be considered incineration.

2.09. "Incinerator" shall mean any device used to accomplish incineration.

2.10. "Flare", 'flare stack' shall mean and include a combustion source normally comprised of but not limited to a length of stack or pipe which has an attached burner mechanism designed to destroy liquid or gaseous material with an open or semi-enclosed flame.

2.11. "Open Burning" shall mean the combustion of refuse whereby the gaseous products of combustion are not conveyed through man-made means from one point to another and are discharged directly to the open air.

2.12. "Refuse" shall mean the useless and/or unwanted or discarded solid, liquid and/or gaseous waste materials resulting from community, commercial, industrial or citizen activities.

2.13. "Construction and Demolition Wastes" shall mean combustible waste building materials and rubble resulting from construction, remodeling, repair and demolition operations on houses, commercial buildings, pavements and other structures.

2.14. "Incinerator Capacity" shall be the manufacturer's or designer's guaranteed maximum charging rate or such other rate as may be determined by the Director in accordance with good engineering practices. In case of conflict the determination by the Director shall govern. For the Purposes of this Regulation the total of the capacities of all furnaces within one system shall be considered as the "incinerator capacity".

2.15. "Director" shall mean the director of the West Virginia Air Pollution Control Commission.

2.16. "Pathological Waste Incinerator" shall mean an incinerator used to dispose of animal and/or human tissue, bandages, medical wastes, and medical laboratory wastes.

2.17. "Industrial Waste Incinerator" shall mean an incinerator which is used to incinerate gaseous, liquid, semi-liquid and/or solid by-product waste from industrial sources.

2.18. "Opacity" shall mean the degree to which smoke and/or particulate matter emissions reduce the transmission of light and obscure the view of an object in the background.

2.19. "Sewage Sludge Incinerator" shall mean an incinerator which is used to incinerate the sludge produced by municipal or industrial sewage treatment plants.

Other words and phrases used in this Regulation, unless otherwise indicated, shall have the meaning ascribed to them in Chapter Sixteen, Article Twenty, Section Two of the Code of West Virginia, 1931, as amended.

Section 3. Open Burning Prohibited.

3.01. General Provisions

The open burning of refuse for the purpose of volume reduction, elimination or product recovery by any person, firm, corporation, association or public agency is prohibited except for the following exemptions:

(a) Vegetation grown on the premises of a home or farm, provided that there is compliance with the provisions of Sub-Section 1.02, and the health, safety, comfort and property of persons are protected from the effects of such burning.

(b) Fires set for the purpose of bona fide instruction and training of public and industrial employees and members of volunteer fire departments in the methods of fighting fires, provided that approval to conduct such burning is received from the Director or his duly authorized representative.

(c) Open burning of construction and demolition wastes, provided that all the following conditions are met:

(1) There is no practical alternate method for the disposal of the material to be burned;

(2) The health, safety, comfort and property of persons are protected from the effects of such burning;

(3) Such burning shall not be conducted for salvage purposes; and,

(4) In non-rural areas approval to conduct such burning is received from the Director or his authorized representative.

(d) Backyard open burning for the reduction of refuse produced on the premises as long as the amount does not exceed that weight normally produced by the everyday living habits of one (1) family, until such families are serviced by a municipal or private refuse collection service.

3.02. The exemptions listed in Sub-Section 3.01 are subject to the following stipulation:

Upon notification by the Director, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Director may deem necessary and feasible.

Section 4. Emission Standards for Incinerators and Incineration

4.01. No person shall cause, suffer, allow or permit particulate matter to be discharged from any incinerator into the open air in excess of the quantity determined by use of the following formula:

Emission (lb/hr)=F x Incinerator Capacity (tons/hr)

where the Factor, F, is as indicated in Table I below:

Table I: Factor, F, for Determining Maximum Allowable Particulate Emissions

Incinerator Capacity	F Factor
A. Less than 5,000 lbs/hr	5.43
B. 15,000 lbs/hr or greater	2.72

4.02. After the effective date of this regulation, in the Counties of Brooke, Hancock, Ohio, Marshall and Kanawha; and the Magisterial Districts of Valley (Fayette County), Scott and Pocatalico (Putnam County), Tygart (Wood County), the City of Fairmont and those portions of Union and Winfield Magisterial Districts west of I-79 (Marion County), no person shall cause, suffer, allow or permit the operation of any incinerator during the period starting one (1) hour before sunset and extending until two (2) hours after sunrise.

This Sub-Section shall not apply to the operation of pathological, industrial, municipal or sewage sludge incinerators.

4.03. Emission of Visible Particulate Matter

No person shall cause, suffer, allow or permit emission of smoke into the atmosphere from any incinerator which is as dark or darker in shade or appearance that that designated as No.1 on the Ringelmann Smoke Chart or the equivalent opacity of this Ringelmann number.

4.04. The provisions of Sub-Section 4.02 shall not apply to smoke, the shade or appearance of which is less than No. 2 on the Ringelmann Smoke Chart or the equivalent opacity of this Ringelmann number, for a period or periods aggregating no more than eight (8) minutes per start-up, or six (6) minutes in any 60-minute period for stoking operations.

4.05. No person shall cause, suffer, allow or permit the emission of particles of unburned or partially burned refuse or ash from any incinerator which are large enough to be individually distinguished in the open air.

4.06. Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.

4.07. Incineration of Residues and Hazardous Materials

Persons responsible for the incineration of hazardous materials such as insecticides, empty insecticide containers, toxic materials, certain chemical residues, explosives, used bandages and other medical wastes, pathological wastes, human and animal remains and other materials shall give the utmost care and consideration to the potential harmful effects of the emissions resulting from such activities. Evaluation of these facilities as to adequacy, efficiency and emission potential will be made on an individual basis by the Commission, working in conjunction with other appropriate governmental agencies.

Section 5. Registration.

Within thirty (30) days after the effective date of this regulation, all persons owning and/or operating incinerators within the state shall have registered with the Commission on forms made available by the Director, the name of the person, company or corporation operating the plant, the address, location, county, ownership (lessee, lessor), the principal officer of the company and any such other reasonable information as the Director may require including but not limited to make, model, capacity, operating temperature, fuel used, stack parameters and description of air pollution control equipment.

Commission on forms to be made available by the Commission. The Director may require any such reasonable information as he may specify.

5.02. Registration of New Incinerators

New incinerators shall be considered duly registered when the owner and/or operator thereof has received from the Director written approval of the plans and specifications submitted, pursuant to the requirements of Section 6.

5.03. Registration of Incinerator Modifications

When incinerators are to be modified by changes in charging method, auxiliary fuel, air pollution control equipment or like changes which significantly affect the emission characteristics of the incinerator, such proposed changes shall be registered with the Commission no later than thirty (30) days prior to their being made.

Section 6. Permits.

No person shall construct, modify or relocate any incinerator without first obtaining a permit in accordance with the provisions of Section Two of Chapter Sixteen, Article Twenty, Paragraph 11b of the Code of West Virginia, as amended, and Regulation XIII of this agency.

Section 7. Reports and Testing.

7.01. At such reasonable times as the Director may designate, the operator of any incinerator shall be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases, when the Director has reason to believe, based on observed violations, that the stack emission limitation is being violated or for compliance testing. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices.

7.02. The Director, or his duly authorized representatives, may conduct such other tests as he may deem necessary to evaluate air pollution emissions other than those noted above.

Section 8. Variances.

8.01. If it can be demonstrated to the Commission that the disposal of certain materials by any method other than burning leans to ground water contamination, then the person responsible for the disposal fo such materials shall submit to the Commission within sixty (60) days a program leading to the construction of a suitable incinerator. If such program is accepted by the Commission, the person shall not be in violation as long as the program is observed.

8.02. Due to unavoidable malfunction of equipment, emissions exceeding those provided for in this regulation may be permitted by the Director for periods not to exceed five (5) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Commission provided a corrective program has been submitted by the owner or operator and approved by the Commission.

Section 9. Delayed Compliance Order.

9.01. The owner or operator of any incinerator in existence prior to the effective date of this regulation which does not meet the emission limitations as specified in Section 4.01 of this regulation shall develop and submit to the Commission, within such time as shall be allowed by the Commission, an acceptable compliance program for the attaining and maintaining of the emission limitations of this regulation as per Section 4.01. The compliance program shall be embodied in a consent order as provided in Chapter 16, Article 20, Section 5(17) of the Code of West Virginia, as amended. Any owner or operator who is currently subject to a consent order that provides for compliance after the effective date of this regulation shall be exempt from the requirements of this section.

9.02. In the event an owner or operator of an incinerator subject to this section fails to submit an acceptable control program within the time allowed, the Commission shall, by final order, determine a reasonable control program for the attaining and maintaining of the emission limitations of this regulation.

Section 10. Effective Date.

Regulation Series VI (1969) was amended by the Commission on the 23rd day of February, 1979, and shall become effective the 1st day of May, 1979. Regulation Series VI (1969), as amended, shall henceforth be cited as Regulation Series VI (1979). Regulation Series VI (1969) was adopted by the Commission on the 22nd day of July, 1969, and became effective September 1, 1969.

REGULATION VII

TO PREVENT AND CONTROL PARTICULATE AIR POLLUTION FROM MANUFACTURING PROCESS OPERATIONS

Section 1. Definitions.

1.01. "Air Pollution," 'statutory air pollution' shall have the meaning ascribed to it in Section Two of Chapter Sixteen, Article Twenty of the Code of West Virginia, as amended.

1.02. "Commission" shall mean the West Virginia Air Pollution Control Commission.

1.03. "Director" shall mean the director of the West Virginia Air Pollution Control Commission.

1.04. "Person" shall mean any and all persons, natural or artificial, including any municipal, public or private corporation organized or existing under the law of this or any other state or county and any firm, partnership, or association of whatever nature.

1.05. "Particulate Matter" shall mean any material, except uncombined water, that exists in a finely divided form as a liquid or solid.

1.06. "Smoke" shall mean small gasborne and airborne particulate matter emitted from a stack or other aperture in sufficient numbers to be visible.

1.07 "Opacity" shall mean the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

1.08 "Ringelmann Smoke Chart" shall be the Ringelmann's Scale for Grading the Density of Smoke published by the U.S. Bureau of Mines or any chart, recorder, indicator, or device which is a standardized method for the measurement of smoke density which is approved by the Commission as the equivalent of said Ringelmann Scale.

1.09 "Fugitive Particulate Matter" shall mean any and all particulate matter generated by any manufacturing process which, if not confined, would be emitted directly into the open air from points other than a stack outlet.

1.10. "Fuel" shall mean any form of combustible matter (solid, liquid, vapor, or gas) that is used as a source of heat.

1.11. "Air Pollution Control Equipment" shall mean any equipment used for collecting or converting smoke and/or particulate matter for the purpose of preventing or reducing emission of these materials into the open air.

1.12. "Standard Condition" shall mean for the purposes of this regulation a temperature of 68 degrees F and a pressure of 29.92 inches of mercury column.

1.13. "Stack," for the purpose of this regulation, shall mean but not be limited to any duct, control equipment exhaust, or similar apparatus, which is designed to vent gases containing particulate matter into the open air.

1.14. "Plant" shall mean and include all equipment, grounds, source operations, and any manufacturing process(es) utilized in an integral complex.

1.15. "Manufacturing Process" shall mean any action, operation or treatment embracing chemical, industrial, or manufacturing efforts, and employing, for example, heat treating furnaces, by-product coke plants, core-baking ovens, mixing kettles, cupolas, blast furnaces, open hearth furnaces, heating and reheating furnaces, puddling furnaces, sintering plants, electric steel furnaces, ferrous and nonferrous foundries, kilns, stills, driers, crushers, grinders, roasters, and equipment used in connection therewith, and all other methods or forms of manufacturing or processing that may emit smoke, particulate matter, or gaseous matter.

1.16. "Process Weight" shall mean that total weight of all materials introduced into a source operation, excluding solid, liquid, and gaseous fuels used solely as fuels, and excluding air introduced for purposes of combustion.

1.17. "Process Weight Rate" shall mean a rate established as follows:

(a) For continuous or long-run steady-state source operations, the total process weight for the entire period of continuous operation or for a typical portion thereof, divided by the number of hours of such period or portion thereof.

(b) For cyclical or batch unit operations, or unit processes, the total process weight for a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period.

Where the nature of any process or operation or the design or any equipment is such as to permit more than one interpretation of this definition, the interpretation that results in the minimum value for allowable emission shall apply.

1.18. "Physical Change" shall mean for the purposes of this regulation, any change in a substance which does not change the properties of the substance. Such changes include but are not limited to crushing, grinding, drying, change of state and sizing.

1.19. "Chemical Change" shall mean for the purposes of this regulation, any change in a substance which does change the properties of the substance and by which a new substance is formed.

1.20. "Source Operation" shall mean the last operation in a manufacturing process preceding the emission of air contaminants which operation:

(a) Results in the separation of the air contaminant from the process materials or in the conversion of the process materials into air contaminants; and

(b) Is not an air pollution abatement operation.

1.21. "A Duplicate Source Operation" shall mean any combination of two or more individual source operations of any size that have the same nomenclature, either formerly adopted and/or commonly sanctioned by usage such as but not limited to two or more rotary driers, basic oxygen furnaces, or electric arc furnaces contained in the same plant.

1.22. "Source Operation Type" shall mean a categorization established as follows:

(a) Type 'a' shall mean any manufacturing process source operation involving glass melting, calcination or physical change except as noted in Type 'c' below.

(b) Type 'b' shall mean any metallurgical manufacturing process source operation. Gray iron cupolas located in the counties of Brooke, Hancock, Ohio, Marshall, and Kanawha; and the Magisterial Districts of Valley (Fayette County), Scott and Pocatalico (Putnam County), Tygart (Wood County), and Union and Winfield (Marion County west of I-79) shall be classified as Type 'b' source operations.

(c) Type 'c' shall mean any wet cement manufacturing process source operation which is used for the primary purpose of calcination. Gray iron cupola located in the areas of the state other than those defined in Sub-Section 1.22(b) shall be classified as Type 'c' source operations.

"cupola"

(d) Type 'd' shall mean any manufacturing process source operation in which materials of any origin undergo a chemical change unless otherwise classified.

Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of source operation type, the interpretation of the Commission shall apply.

Other words and phrases used in this regulation, unless otherwise indicated, shall have the meaning ascribed to them in Section Two of Chapter Sixteen, Article Twenty of the Code of West Virginia, as amended.

Section 2. Emission of Smoke and/or Particulate Matter Prohibited and Standards of Measurements

2.01. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is darker in shade or appearance than that designated as No. 1 on the Ringelmann Smoke Chart or the equivalent opacity of this Ringelmann number, except as noted in Sub-Sections 2.02, 2.03, 2.04, and 2.05.

2.02. The provisions of Sub-Section 2.01 shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than No. 2 on the Ringelmann Smoke Chart or the equivalent opacity of this Ringelmann number for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.

2.03. The provisions of Sub-Sections 2.01 and 2.02 shall not apply to smoke and/or particulate matter emitted during the charging or pushing operations of a coke production facility in existence on the effective date of this regulation. The following conditions will apply:

(a) Effective January 1, 1971, emission of smoke and/or particulate matter the shade or appearance of which is no darker than No. 3 on the Ringelmann Smoke Chart or the equivalent opacity of that Ringelmann number shall be permitted for a period or periods aggregating no more than three (3) minutes per charge and one (1) minute per push.

(b) Effective July 1, 1971, emission of smoke and/or particulate matter the shade or appearance of which is no darker than No. 3 on the Ringelmann Smoke Chart or the equivalent opacity of that Ringelmann number shall be permitted for a period or periods aggregating no more than two (2) minutes per charge and one (1) minute per push.

(c) Effective January 1, 1972, emission of smoke and/or particulate matter the shade or appearance of which is no darker than No. 2.5 on the Ringelmann Smoke Chart or the equivalent opacity of that Ringelmann number shall be permitted for a period or periods aggregating no more than two (2) minutes per charge and one (1) minute per push.

(d) Effective July 1, 1972, emission of smoke and/or particulate matter the shade or appearance of which is not as dark as or darker than No. 2 on the Ringelmann Smoke Chart or the equivalent opacity of that Ringelmann number shall be permitted for a period or periods aggregating no more than two (2) minutes per charge and one (1) minute per push.

2.04. The provisions of Sub-Sections 2.01, 2.02 and 2.03 shall not apply to the charging or pushing operations of a coke production facility installed after July 1, 1970. Emission of smoke and/or particulate matter the shade or appearance of which is less than No. 2 on the Ringelmann Smoke Chart or the equivalent opacity of that Ringelmann number shall be permitted for a period or periods aggregating no more than one and one-half (1.5) minutes per charge and one-half (0.5) minutes per push.

2.05. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any storage structure associated with any manufacturing process.

Section 3. Control and Prohibition of Particulate Emissions by Weight From Manufacturing Process Source Operations.

3.01. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in the following table:

Operating Source Operation or Total Duplicate Source Operation Process Weight Rate in Pounds per Hour [1]	Maximum Allowable Total Stack Emission Rate in Pounds per Hour for the Appropriate Process Weight and Source Operation Type			
	Type 'a'	Type 'b'	Type 'c'	Type 'd'[2]
0	0	0	0	0
2,500	3	3	9	0.2
5,000	5	5	13	0.8
10,000	10	10	19	1.8
20,000	16	16	26	4.0
30,000	22	22	32	6.2
40,000	28	28	36	8.3
50,000	31	31	40	10.5
100,000	33	33	54	21.2
200,000	37	37	70	21.2
300,000	40	40	80	21.2
400,000	43	46	88	21.2
500,000	47	53	94	21.2
600,000	50	62	99	21.2
700,000	50	71	99	21.2
800,000	50	79	99	21.2
900,000	50	88	99	21.2
1,800,000 and above	50	176	99	21.2

[1] For a process weight between any two consecutive process weights stated in this table the emission limitation shall be determined by linear interpolation.

[2] Type 'd' source operation stack emission rates do not apply to MINERAL ACIDS. See Sub-Section 3.02.

3.02 Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate operation in excess of the quantity given in the following table:

Mineral Acid	Allowable Stack Gas Concentration in Milligrams per Dry Cubic Meter at Standard Conditions from Source Operations or Duplicate Source Operations in Existence on the Effective Date of this Regulation	Allowable Stack Gas Concentration in Milligrams per Dry Cubic Meter at Standard Conditions from Source Operations or Duplicate Source Operations Installed After the Effective Date of this Regulation
Sulfuric Acid Mist.......	70	35
Nitric Acid Mist and/or Vapor......	140	70
Hydrochloric Acid Mist and/or Vapor	420	210
Phosphoric Acid Mist and/or Vapor	6	3

3.03. No person shall circumvent the provisions of this regulation by adding additional gas to any exhaust or group of exhausts for the purpose of reducing the stack gas concentration.

3.04. If a duplicate source operation that meets the requirements of this regulation is expanded or if a source operation that meets the requirements of this regulation is expanded to form a duplicate source operation, the total allowable emission rate for the expanded portion shall be determined by the following formula:

$$R_e = \left(\frac{W_e}{W_{et}} \right) R_{et}$$

Where,

R_e is the total allowable emission rate in pounds per hour for the new expanded portion of the duplicate source operation;

W_{et} is the total operating process weight rate in pounds per hour of the source operation or duplicate source operation prior to expansion plus the operating process weight rate of the new expanded portion;

R_{et} is the allowable emission rate in pounds per hour found in Sub-Section 3.01 opposite the process weight rate, W_{et};

W_e is the operating process weight rate in pounds per hour for the new expanded portion.

3.05. Separate stack emission rates for the new expanded portions of concern in Sub-Section 3.04 shall be calculated as per Sub-Section 3.09. The applicable stack emission rate(s) so calculated shall be additive with the existing emission rate for any stack used to vent both an existing source operation or duplicate source operation(s) and the addition(s) or portion(s) thereof.

3.06 The operating process weight for new plants which will contain duplicate source operations shall include the total process weight of those duplicate units to be installed during the initial five(5) year operating period.

3.07. Except as noted in Sub-Section 3.08, the increase of the operating process weight rate of any manufacturing process source operation or duplicate source operation by the operation or new, replacement, reactivated, and/or altered source operation(s) which resulted in the increase shall be determined as per Sub-Section 3.04.

3.08. (a) Type 'b' duplicate source operations whose air pollution control equipment efficiency is a minimum of 99% by weight and whose total process weight rate is less than 250,000 pounds per hour shall be exempted from the requirements of Sub-Section 3.01 provided that smoke emitted into the open air from any such duplicate source operation is not as dark or darker in shade or appearance than that desingated as No.1 on the Ringelmann Smoke Chart or the equivalent opacity of that Ringelmann number. If a duplicate source operation is expanded by the addition of a new source operation(s) and the total operating process weight rate is then greater than 250,000 pounds per hour, the allowable emission rates from the source operation which resulted in the increase above 250,000 pounds per hour shall be determined as per Sub-Section 3.03.

(b) Primary aluminum reduction potlines which are equipped with a fluidized bed reactor or other similar gas cleaning device which utilizes particulate matter as a media or as a component of a media for collecting or reducing the emissions of gaseous fluorides, shall be exempted from the requirements of Sub-Sections 3.01 and 3.04 provided that:

(1) At least 99% of the gaseous fluoride is removed from the exit gas stream by such device prior to discharging the cleaned gas stream to the open air; and

(2) The particulate matter loading in the exit gas stream is not greater than 0.01 grains per standard cubic foot of dry stack gas; and

(3) The smoke emitted into the open air from any such duplicate source operation is not as dark or darker in shade or appearance than that designated as No. 1 on the Ringelmann Smoke Chart or the equivalent opacity of that Ringelmann number. If a duplicate source operation is expanded by the addition of new source operation(s) and the total operating process weight rate is then greater than 250,000 pounds per hour, the allowable emission rates from the source operation which resulted in the increase above 250,000 pounds per hour shall be determined as per Sub-Section 3.04.

3.09. Where more than one source operation or combinations thereof, which are part of a duplicate source operation, are vented through separate stacks, the allowable stack emission rates for the separate stacks shall be determined by the following formula:

$$R_s = R_t \frac{W_s}{W_t}$$

Where,

R_s is the allowable stack emission rate for the separate stack venting the source operation(s) in question;

R_t is the total allowable emission rate for the duplicate source operation;

W_s is the operating process weight rate for the source operation(s) vented through the separate stack;

W_t is the total operating process weight rate for the duplicate source operation.

3.10. The provisions of this Section shall not apply to the coking of coal. See Section 2.

3.11. Any stack serving any process source operation or air pollution control equipment on any process source operation shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.

3.12. Potential Hazardous Material Emissions.

Persons responsible for manufacturing process source operations from which hazardous particulate material may be emitted such as, but not limited to, lead, arsenic, beryllium, and other such materials shall give the utmost care and consideration to the potential harmful effects of the emissions resulting from such activities. Evaluation of these facilities as to adequacy, efficiency and emission potential will be made on an individual basis by the Commission working in conjunction with other appropriate governmental agencies.

Section 4. Control of Fugitive Particulate Matter.

4.01. No person shall cause, suffer, allow or permit any manufacturing process generating fugitive particulate matter to operate that is not equipped with a fugitive particulate matter control system, This system shall be operated and maintained in such a manner as to minimize the emission of fugitive particulate matter.

4.02. The owner or operator of a plant shall maintain dust control of the plant premises and plant owned, leased, or controlled access roads by paving or other suitable measures. Good operating practices shall be observed in relation to stockpiling and general maintenance to prevent dust generation and atmospheric entrainment.

Section 5. Registration.

After the effective date of this regulation all persons owning and/or operating an existing manufacturing process source operation not previously registered shall register such source operation with the Commission. The information required for registration shall be determined by the Director, and shall be provided in the manner specified by the Director.

Section 6. Permits.

No person shall construct, modify, or relocate any manufacturing process source operation without first obtaining a permit in accordance with the provisions of Section Two, Chapter Sixteen, Article Twenty, Paragraph 11b of the Code of West Virginia, as amended, and Regulation XIII of this agency.

Section 7. Reports and Testing.

7.01. At such reasonable times as the Director may designate, the operator of any manufacturing process source operation may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases when the Director has reason to believe that the stack emission limitation(s) is/are being violated. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices.

7.02. The Director, or his duly authorized representative may conduct such other tests as he may deem necessary to evaluate air pollution emissions other than those noted in Section 2 and 3.

Section 8. Compliance Programs and Schedules.

8.01. In the event that process equipment or operations in existence prior to the adoption of this regulation do not meet the emission limitations, an acceptable program to fully comply with the regulation shall be developed and offered to the Commission by the person responsible for the installation. This program shall be submitted upon the request of and within such time as shall be fixed by the Commission. Once this program has been approved by the Commission, the owner, and/or operator of such installation shall not be in violation of this regulation so long as the approved or amended program is observed. Compliance programs, schedules, and variances that have previously been issued by the Commission under Regulation VII (1974) shall remain in effect until the expiration date of that compliance program, schedule, or variance.

8.02. In the event that an owner or operator of such process equipment fails to submit a program or an acceptable program and schedule, the Commission shall, by order, determine the compliance program and schedule.

Section 9. Variance.

9.01. Due to unavoidable malfunction of equipment, emissions exceeding those provided for in this regulation may be permitted by the Director for periods not to exceed 10 days upon specific application to the Director. Such application shall be made within 24 hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Commission provided a corrective program has been submitted by the owner or operator and approved by the Commission.

Section 10. Exemptions.

10.01. Provisions of this Regulation shall not apply to particulate emissions regulated by Regulations II, III,V, and VI or to internal combustion engines, aircraft, and air entrained particulate matter from public or private carriers.

Section 11. Effective Date.

Regulation Series VII (1974) was amended by the Commission on the 23rd day of February, 1979, and shall become effective the 1st day of May, 1979. Regulation Series VII (1974), as amended, shall henceforth be cited as Regulation Series VII (1979). Regulation Series VII (1974) was adopted by the Commission on the 28th day of August, 1974, and became effective October 1, 1974, and superceded Regulation Series VII (1970) which was adopted by the Commission on the 27th day of May, 1970, and became effective July 1, 1970.

REGULATION VIII

AMBIENT AIR QUALITY STANDARDS FOR SULFUR OXIDES AND PARTICULATE MATTER.

Section 1. Anti-Degradation Policy.

1.01. In the best interests of the State of West Virginia, it is the objective of the Commission to obtain and maintain the cleanest air possible, consistent with the best available technology.

Where the present ambient air is of better quality than the established standards, the Commission will develop long-range plans to protect the difference between the present quality and the established standards. The plans will be based upon the best available forecasts of probable land and air uses in such areas of high air quality.

The air quality of these areas will not be lowered unless it has been clearly demonstrated to the Commission that such a change is justifiable as a result of necessary economic or social development and will not result in a statutory air pollution.

This will require that any industrial, public, or private project or development which could constitute a new source of air pollutants, within an area of such high air quality, provide the best practicable control available under existing technology as part of the initial project.

Section 2. Definitions.

2.01. "Air Pollutants" shall mean solids, liquids or gases which, if discharged into the air, may result in a statutory air pollution.

2.02. "Air Pollution", 'statutory air pollution', shall have the meaning ascribed to it in Section Two of Chapter Sixteen, Article Twenty of the Code of West Virginia, as amended.

2.03. "Commission" shall mean the West Virginia Air Pollution Control Commission.

2.04. "Person" shall mean any and all persons, natural or artificial, including any municipal, public, or private corporation organized or existing under the law of this or any other state or country, and any firm, partnership, or association of whatever nature.

2.05. "Particulate Matter" shall mean any material, except uncombined water, that exists in a finely divided form as a liquid or solid.

2.06. "Standard Conditions" shall mean, for the purposes of this regulation, a temperature of 25°C and a pressure of 760 millimeters of mercury column.

2.07. "Ambient Air Quality Standards" shall mean the numerical expression of a specified concentration level for a particular air pollutant in the ambient air and the time-averaging interval over which that concentration level is measured.

Section 3. Ambient Air Quality Standards.

The following ambient air quality standards shall not be exceeded at any sampling site:

(a) Sulfur Dioxide

Primary Standard

Annual Arithmetic Mean - 80 micrograms per cubic meter (0.03 parts per million)

Maximum 24-Hour Concentration - 365 micrograms per cubic meter (0.14 ppm) - not to be exceeded more than once per year

Secondary Standard

Maximum Three (3) Hour Concentration - 1300 micrograms per cubic meter (0.50 ppm) - not to be exceeded more than once per year

(b) Particulate Matter

Primary Standard

Annual Geometric Mean - 75 micrograms per cubic meter

Maximum 24-Hour Concentration - 260 micrograms per cubic meter - not to be exceeded more than once per year

Secondary Standard

Maximum 24-Hour Concentration - 150 micrograms per cubic meter - not to be exceeded more than once per year

Section 4. Methods of Measurement.

4.01. Suspended particulate matter concentrations shall be determined by high-volume filtration or by such other methods approved as equally or more specific, accurate, sensitive, and reproducible by the West Virginia Air Pollution Control Commission.[1]

4.02. Sulfur dioxide concentrations shall be determined by any of the methods listed below or by such other methods approved as equally or more specific, accurate, sensitive, and reproducible by the West Virginia Air Pollution Control Commission:

(a) Utilization of the West-Gaeke (pararosaniline) method as modified by Scaringelli, et al.[2]

(b) The use of a continuous sampling and recording instrument based on coulometric, colorimetric, or an equivalent principle and utilizing the modified West-Gaeke analytical procedure as a standard means of calibration.

Section 5. Effective Date.

Regulation Series VIII (1975) was amended by the Commission on the 8th day of January, 1979, and shall become effective the 27th day of October, 1979. Regulation Series VIII (1975), as amended, shall henceforth be cited as Regulation Series VIII (1979). Regulation Series VIII (1975) was adopted by the Commission on the 25th day of June, 1975, and became effective the 1st day of August 1975, and superseded Regulation Series VIII (1972) which was adopted by the Commission on the 19th day of January, 1972, and became effective March 15, 1972.

References

[1] "Air Pollution Measurements of the National Air Sampling Network: Analysis of Suspended Particulates, 1957-1961." Public Health Service Pub. No. 978, Washington D.C., 1962.

[2] Scaringelli, F. P., Saltzman, B. E., and Frey, S. A., Spectrophotometric Determination of Atmospheric Sulfur Dioxide." Analytical Chemistry, Vol. 39, pp. 1709-1719, December, 1967.

REGULATION IX

AMBIENT AIR QUALITY STANDARDS FOR CARBON MONOXIDE, NON-METHANE HYDROCARBONS, AND PHOTOCHEMICAL OXIDANTS.

Section 1. Anti-Degradation Policy.

1.01. In the best interests of the State of West Virginia, it is the objective of the Commission to obtain and maintain the cleanest air possible, consistent with the best available technology.

Where the present ambient air is of better quality than the established standards, the Commission will develop long-range plans to protect the difference between the present quality and the established standards. The plans will be based upon the best available forecasts of probable land and air used in such areas of high air quality.

The air quality of these areas will not be lowered unless it has been clearly demonstrated to the Commission that such a change is justifiable as a result of necessary economic or social development and will not result in "Statutory Air Pollution". This will require that any industrial, public, or private project or development which could constitute a new source of air pollutants, within an area of such high air quality, provide the best practicable control available under existing technology as part of the initial project.

Section 2. Definitions.

2.01. "Air Pollutants" shall mean solids, liquids, or gases which, if discharged into the air, will result in a statutory air pollution.

2.02. "Air Pollution", 'statutory air pollution', shall have the meaning ascribed to it in Section Two of Chapter Sixteen, Article Twenty of the Code of West Virginia, as amended.

2.03. "Commission" shall mean the West Virginia Air Pollution Control Commission.

2.04. "Person" shall mean any and all persons, natural or artificial, including any municipal, public, or private corporation organized or existing under the law of this or any other state or country and any firm, partnership, or association of whatever nature.

2.05. "Hydrocarbons" shall mean compounds whose molecules consist of atoms of hydrogen and carbon and exist in the atmosphere in the gas phase. Specifically excluded are hydrocarbons and other organics associated only with suspended particles in the atmosphere. For purposes of these quality standards non-methane hydrocarbons shall be taken to be the difference between the reported total hydrocarbons and methane values obtained from an air sample.

2.06. "Photochemical Oxidant" shall be the term used to describe the net oxidizing ability of the ambient air. Oxidants are produced in the ambient air as the result of complex photochemical reactions.

2.07. "Standard Conditions" shall mean for the purposes of this regulation a temperature of 25°C and a pressure of 760 mm of mercury column.

2.08. "Ambient Air Quality Standards" shall mean the numerical expression of a specified concentration level for a particular air pollutant in the ambient air and the time averaging interval over which that concentration level is measured.

Section 3. Ambient Air Quality Standards.

3.01. The following air pollutant concentrations shall not be exceeded at any sampling site:

(a) Carbon Monoxide

Maximum Eight (8) Hour Concentration, 10 milligrams per cubic meter (9ppm) - not to be exceeded more than once per year.

Maximum One (1) Hour Concentration, 40 milligrams per cubic meter (35ppm) - not to be exceeded more than once per year.

(b) Photochemical Oxidants (Measured and Corrected For Interferences Due to Nitrogen Oxides and Sulfur Dioxide)

Maximum One (1) Hour Concentration, 160 micrograms per cubic meter (0.08 ppm) - not to be exceeded more than once per year.

(c) Hydrocarbons (Measured and Corrected for Methane)

Maximum Three (3) Hour Concentration, 160 micrograms per cubic meter (0.24ppm) for the time period of 6:00 a.m. to 9:00 a.m. - not to be exceeded more than once per year.

The hydrocarbon standard is to be used as a guide in devising implementation plans to achieve oxidant standards.

Section 4. Methods of Measurement.

4.01. Carbon Monoxide concentrations shall be determined by nondispersive infrared (NDIR) methods or by such other methods approved as equally or more specific, accurate, sensitive, and reproducible by the West Virginia Air Pollution Control Commission.

4.02. Photochemical Oxidant concentrations shall be determined by the neutral buffered potassium iodide method as modified by Saltzman, et al, or by such other methods approved as equally or more specific, accurate, sensitive, and reproducible by the West Virginia Air Pollution Control Commission.

4.03. Hydrocarbon concentrations shall be determined by subtraction of methane concentrations from total hydrocarbon concentrations determined by the flame ionization technique or by such other methods approved as equally or more specific, accurate, sensitive, and reproducible by the West Virginia Air Pollution Control Commission.

4.04. Other less specific methods of measurement may be used provided an accurate method of conversion can be developed to express the results in terms of equivalence to those that would be expected using the above methods of other more specific, accurate, sensitive, and reproducible methods approved by the West Virginia Air Pollution Control Commission.

Section 5. Effective Date.

Regulation IX shall become effective September 1, 1971.

REGULATION X

TO PREVENT AND CONTROL AIR POLLUTION FROM THE EMISSION OF SULFUR OXIDES

Section 1. Intent and Purpose.

1.01. Fuel Quality Goals. It is the intent of the Commission that all persons engaged in the burning of fuel make a maximum effort to utilize the best quality fuel available regardless of the requirements of this regulation.

Section 2. Definitions.

2.01. "Air Pollution", 'statutory air pollution', shall have the meaning ascribed to it in Section Two of Chapter Sixteen, Article Twenty of the Code of West Virginia, as amemded.

2.02. "Air Pollutants" shall mean solids, liquids, or gases which, if discharged into the air, may result in a statutory air pollution.

2.03. "Commission" shall mean the West Virginia Air Pollution Conrol Commission.

2.04. "Director" shall mean the director of the West Virginia Air Pollution Control Commission.

2.05. "Person" shall mean any and all persons, natural or artificial, including any municipal, public or private corporation organized or existing under the laws of this or any other state or country, and any firm, partnership, or association of whatever nature.

2.06. "Fuel Burning Unit" shall mean and include any furnace, boiler apparatus, device, mechanism, stack or structure used in the process of burning fuel or other combustible material for the primary purpose of producing heat or power by indirect heat transfer. For the purposes of this regulation, all fuel burning units are classified in the following categories:

(a) Type 'a' shall mean any fuel burning unit which has as its primary purpose the generation of steam or other vapor to produce electric power for sale.

(b) Type 'b' shall mean any fuel burning unit not classified as a Type 'a' or Type 'c' unit such as industrial pulverized-fuel-fired furnaces, cyclone furnaces, gas-fired and liquid-fuel-fired units.

(c) Type 'c' shall mean any hand-fired or stoker-fired fuel burning unit not classified as a Type 'a' unit.

2.07. "Waste Heat Boiler" shall mean any boiler which derives all or part of its heat input from the waste heat of a manufacturing process operation.

2.08. "Fuel" shall mean any form of combustible matter (solid, liqued, vapor, or gas) that is used as a source of heat.

2.09. "Priority I Regions", "Priority II Regions", and "Priority III Regions" are defined as follows:

Priority Classification	Federal Air Quality Control Region	Included West Virginia Counties
I	Region I-Steubenville-Weirton-Wheeling Interstate Air Quality Control Region(Ohio-W. Va.)	Brooke Hancock Marshall Ohio
	Region VII-Cumberland-Keyser Interstate Air Quality Control Region (W. Va. - Md.)	Grant (Union District only) Mineral (Elk, New Creek, and Piedmont Districts)
II	Region II-Parkersburg-Marietta Interstate Air Quality Control Region (W. Va. - Ohio)	Jackson Pleasants Tyler Wetzel & Wood
III	All other regions	All other counties or districts not listed above

2.10. "Air Pollution Control Equipment" shall mean any equipment used for collecting, confining, or converting air pollutants for the purpose of preventing or reducing the emission of these pollutants into the open air.

2.11. "Manufacturing Process" shall mean any action, operation or treatment embracing chemical, industrial, or manufacturing efforts, and employing, for example, heat-treating furnaces, by-product coke plants, core-baking ovens, mixing kettles, cupolas, blast furnaces, open hearth furnaces, heating and reheating furnaces, puddling furnaces, sintering plants, electric steel furnaces, ferrous and non-ferrous foundries, kilns, stills, pipe stills, reformers, furnaces associated with manufacturing processes, driers, crushers, grinders, roasters, and equipment used in connection therewith, and all other methods or forms of manufacturing or processing that may emit sulfur dioxide or other sulfur compounds.

2.12. "Source Operation" shall mean the last operation in a manufacturing process preceding the emission of air pollutants which operation:

(a) Results in the separation of the air pollutant from the process materials or in the conversion of the process materials into air pollutants: and

(b) Is not an air pollution abatement operation.

2.13 "Sulfur Dioxide" is an air pollutant which is a nonflammable, nonexplosive, colorless, gaseous molecule composed of one atom of sulfur and two atoms of oxygen. In concentrations of 0.3 to 1.0 parts per million and above, most people can detect it by taste; in concentrations greater than 3.0 parts per million it has a pungent, irritating odor to most people.

2.14. "Plant" shall mean and include all fuel burning units, source operations, equipment and grounds utilized in an integral complex.

2.15. "Equivalent Fuel Sulfur Content" shall mean that quantity of sulfur dioxide in pounds per million British Thermal Units (B.T.U.'s) which corresponds to a given percent sulfur in fuel being burned and is calculated on the basis of 100 percent conversion of the sulfur to sulfur dioxide and assuming that no sulfur or sulfur dioxide recovery or control measures are employed.

2.16. "Stack", for the purposes of this regulation, shall mean, but not be limited to, any duct, control equipment exhaust, or similar apparatus, which vents gases and/or particulate matter into the open air.

Section 3. Sulfur Dioxide Weight Emission Standards For Fuel Burning Units.

3.01 Total Allowable Emission Rates For Similar Units In Priority I and Priority II Regions.

(a) No person shall cause, suffer, allow, or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the amount determined as follows:

(1) For fuel burning units of the Kammer Plant of Ohio Power Company, located in Air Quality Control Region I, the product of 6.8 and the total design heat inputs for such units discharging through those stacks in million British Thermal Units (B.T.U.'s) per hour.

(2) For fuel burning units of the Mitchell Plant of Ohio Power Company, located in Air Quality Control Region I, the product of 7.5 and the total actual operating heat inputs for such units discharging through those stacks in million B.T.U.'s per hour.

(3) For fuel burning units of the Willow Island Station of Monongahela Power Company, located in Air Quality Control Region II, the product of 2.7 and the total design heat inputs for such units discharging from those stacks in million B.T.U.'s per hour.

(4) For fuel burning units of the Mt. Storm Plant of Virginia Electric and Power Company, located in Air Quality Control Region VII, the product of 2.7 and the total design heat inputs for such units discharging through those stacks in million B.T.U.'s per hour.

(5) For Type 'b' and Type 'c' fuel burning units, the product of 3.1 and the total design heat inputs for such units discharging through those stacks in million B.T.U.'s per hour.

3.02 Maximum Allowable Emission Rates for Similar Units In Region IV (Kanawha Valley Air Quality Control Regions: Kanawha County, Putnam County, and Falls and Kanawha Magisterial Districts of Fayette County).

No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the amount determined as follows:

(1) For fuel burning units of the John Amos Plant of Appalachian Power Company, located in Air Quality Control Region IV, the product of 1.6 and the total design heat inputs for such units discharging from those stacks in million B.T.U.'s per hour.

(2) For fuel burning units of the Kanawha River Plant of Appalachian Power Company, located in Air Quality Control Region IV, the product of 1.6 and the total design heat inputs for such units discharging through those stacks in million B.T.U.'s per hour.

(3) For Type 'b' and Type 'c' fuel burning units, the product of 1.6 and the total design heat inputs for such units discharging through those stacks in million B.T.U.'s per hour, provided however, that no more than 5,500 pounds per hour of sulfur dioxide shall be discharged into the open air from all such stacks.

3.03. Maximum Allowable Emission Rates For Similar Units In All Priority III Regions Except Region IV.

(a) No person shall cause, suffer, allow, or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the amount determined as follows:

  (1) For fuel burning units of the Harrison Power Station of Monongahela Power Company, located in Air Quality Control Region VI, the product of 5.12 and the total actual operating heat inputs for such units discharging from those stacks in million B.T.U.'s per hour.

  (2) For fuel burning units of the Rivesville Power Station of Monongahela Power Company, located in Air Quality Control Region VI, the product of 3.2 and the total design heat inputs for such units discharging from those stacks in million B.T.U.'s per hour.

  (3) For fuel burning units of the Albright Power Station of Monongahela Power Company, located in Air Quality Control Region VI, the product of 3.2 and the total design heat inputs for such units discharging from those stacks in million B.T.U.'s per hour.

(4) For fuel burning units of the Fort Martin Power Station of Monongahela Power Company, located in Air Quality Control Region VI, the product of 3.1 and the total actual operating heat inputs for such units discharging from those stacks in million B.T.U.'s per hour.

(5) For fuel burning units of the Philip Sporn Plant of Central Operating Company, located in Air Quality Control Region III, the product of 3.2 and the total design heat inputs for such units discharging from those stacks in million B.T.U.'s per hour.

(6) For Type 'b' and Type 'c' fuel burning units, the product of 3.2 and the total design heat inputs for such units discharging through those stacks in million B.T.U.'s per hour.

(b) Not later than June 30, 1978, the requirements of Sub-Section 3.01 (b) shall apply to all Type 'a', Type 'b', and Type 'c' fuel burning units.

Note: 3.03(b) applies only to the Rivesville Plant, Monongahela Power Co. The deletion of 3.03(b) was approved for all other sources.

3.04. Allowable Emission Rates For Individual Stacks.

The maximum allowable emission rate for an individual stack shall not exceed by more than 25 percent the emission rate determined by prorating the total allowable emission rate specified in Sub-Sections 3.01, 3.02, or 3.03 on the basis of individual unit heat input at design capacity for all fuel burning units discharging through that stack.

Subject to the provisions of this regulation, allowable emission rates for individual stacks shall be determined by the owner and/or operator and registered with the Commission at the request of and on forms provided by the Director, Such rates shall be subject to review and approval by the Director.

The approved set of individual stack allowable emission rates shall become an official part of the compliance schedule and any permits concerning such source or sources, and shall not be changed without the prior written approval of the Director.

3.05 The design heat input of a waste heat boiler shall not be included in computing the total plant design heat input for the purposes of Sub-Sections 3.01, 3.02, 3.03, or 3.04 of this regulation.

3.06. No person shall circumvent the provisions of this regulation by constructing fuel burning unit(s) larger than would be necessary to provide heat and/or power for an existing manufacturing plant, with a reasonable margin for plant expansion, in order to use that design heat input to raise the allowable sulfur content in fuel.

3.07. No person shall cause, suffer, allow, or permit the discharge of sulfur dioxide to the open air from the combustion of fuel in a fuel burning unit of a waste heat boiler in excess of 2.2 pounds of sulfur dioxide per million B.T.U.'s of heat input per hour. This limitation is based on the heat input provided to the boiler by the combustion of this auxiliary fuel.

The provision of this Sub-Section applies only to the fuel used for the waste heat boiler(s) and does not replace or supersede the provisions of Sub-Section 3.08.

3.08. Weight Emission Standards for Manufacturing Process Source Operations.

(a) No person shall cause, suffer, allow, or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in Sub-Sections (b), (c), (d), (e), and (f) following.

(b) No person shall cause, suffer, allow, or permit sulfur dioxide tail gas emissions from sulfuric acid manufacturing plants to exceed the following:

(1) For plants using elemental sulfur as a feed stock, 30 pounds per ton of acid produced.

(2) For plants using other materials as a feed stock, 40 pounds per ton of acid produced.

(c) No person shall cause, suffer, allow, or permit the emission of sulfur oxides, calculated as sulfur dioxide, from a sulfur recovery plant to exceed 0.06 pounds per pound of sulfur processed.

(d) No person shall cause, suffer, allow, or permit the combustion of any refinery process gas stream or any other process gas stream that contains hydrogen sulfide in a concentration greater than 50 grains per 100 cubic feet of gas. In certain cases very small units may be considered exempt from this requirement if, in the opinion of the Commission, compliance would be economically unreasonable and if the contribution of the unit to the surrounding air quality could be considered negligible.

(e) No person shall cause, suffer, allow, or permit the emission of sulfur oxides, calculated as sulfur dioxide, from primary non-ferrous smelters to exceed that determined by the following equations:

Copper Smelters: $Y = 0.2\ X$
Zinc Smelters: $Y = 0.564\ X^{0.85}$
Lead Smelters: $Y = 0.98\ X^{0.77}$

Where X is the total sulfur fed to the smelter in pounds per hour, and Y is the allowable sulfur dioxide emissions in pounds per hour.

(f) No person shall cause, suffer, allow or permit the total sulfite pulp mill emissions of sulfur oxides, calculated as sulfur dioxide, from operations such as blow pits, washer vents, storage tanks, digester relief, and recovery system, to exceed 9.0 pounds per air-dried ton of pulp produced.

Section 4. Registration.

4.01. Within thirty (30) days after the effective date of this regulation all persons owning and/or operating a source(s) of sulfur dioxide subject to this regulation and not previously registered shall have registered such source(s) with the Commission. The information required for registration shall be determined and provided in the manner specified by the Director. Registration forms should be requested from the Director by the owner and/or operator of such source(s).

4.02 The owner and/or operator of a source(s) of sulfur dioxide that is under construction or on which construction is initiated within thirty (30) days after the effective date of this regulation shall register such source(s) within this thirty (30) day period.

Section 5. Permits.

5.01. After the effective date of this regulation, no person shall construct or modify any source of sulfur dioxide without first obtaining a permit for such construction or modification. Applications for permits shall be made upon forms available from the Director and shall be filed no less than ninety (90) days prior to the construction or modification. These forms shall include such information as in the judgment of the Director will enable him to determine whether such source will be so designed as to operate in conformance with the provisions of this regulation and the Code of West Virginia, and will not cause or contribute to the violation of Air Quality Standards. Within ninety (90) days of the receipt of an application the Director shall issue or deny such permit in accordance with the provisions of Section 2 of Chapter 16, Article 20, Paragraph 11b of the Code of West Virginia, as amended, and Regulation XIII of this agency.

Section 6. Reports and Testing.

6.01. (a) Tests to determine compliance with the allowable sulfur dioxide emission limitations from manufacturing process source operations shall be based on a two (2) hour averaging time.

(b) Tests to determine compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. The owner and/or operator of a fuel burning unit shall not allow emissions to exceed the weight emission standards for sulfur dioxide as set forth in this regulation, except during one (1) continuous twenty-four (24) hour period in each calendar month and during this one (1) continuous twenty-four (24) hour period said owner and/or operator shall not allow emissions to exceed such weight emission standards by more than ten (10) percent without causing a violation of this regulation. A standard starting time for all continuous twenty-four (24) hour periods shall be fixed in writing by mutual agreement between the Director and the owner and/or operator of the fuel burning unit.

6.02. (a) At the request of the Commission the owner and/or operator of a source shall install such stack gas monitoring devices as the Director deems necessary to determine compliance with the provisions of this regulation. The data from such devices shall be readily available at the source location or such other reasonable location that the Director may specify. At the request of the Director, or his duly authorized representative, such data shall be made available for inspection or copying. Failure to promptly provide such data shall constitute a violation of this regulation.

(b) Prior to the installation of calibrated stack gas monitoring devices, sulfur dioxide emission rates shall be calculated on an equivalent fuel sulfur content basis.

6.03. At such reasonable times as the Director may designate, the owner or operator of a source(s) of sulfur dioxide may be required to conduct or have conducted tests to determine the compliance of such source(s) with the emission limitations of Section 3. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director.

The Director, or his duly authorized representative, may at his option witness or conduct such tests. Should the Director exercise his option to conduct such tests, the operator will provide all necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices.

6.04. The Director, or his duly authorized representative, may conduct such other tests as he may deem necessary to evaluate air pollution emissions other than those noted in Section 3.

6.05. The operators of the fuel burning units or persons selling fuel shall submit data on the fuel used or sold for use in such units. Such data shall be reported in the manner the Director may specify. However, reports on such data shall not exceed one (1) per month. Such reports must be filed within fifteen (15) days of the end of the established reporting period and will include, but not necessarily be limited to, information such as the quantity of fuel burned or sold and the sulfur, moisture, volatile matter, and B.T.U. content.

Section 7. Compliance Programs and Schedules.

7.01. In the event that a source(s) of sulfur dioxide in existence prior to the adoption of this regulation does not meet the emission limitaions, an acceptable program to fully comply with the regulation shall be developed and offered to the Commission by the person responsible for the source. This program shall be submitted upon the request of, and within such time as shall be fixed by, the Commission. Once this program has been approved by the Commission, the owner and/or operator of such installation shall not be in violation of this regulation so long as the approved or amended program is observed.

7.02. In the event that an owner or operator of such a source(s) of sulfur dioxide fails to submit a program or an acceptable program and schedule, the Commission, shall, by order, determine the compliance program and schedule.

Section 8. Variance.

8.01. Due to unavoidable malfunction of equipment or inadvertent fuel shortages, emissions exceeding those provided for in this regulation may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the equipment malfunction or fuel shortage. In cases of major equipment failure or extended shortages of conforming fuels, additional time periods may be granted by the Commission provided a corrective program has been submitted by the owner or operator and approved by the Commission.

Section 9. Exemptions and Recommendations.

9.01. All fuel burning units having a heat input under ten (10) million B.T.U.'s per hour will be exempt from Section 3 through Section 8. However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date.

9.02. In an effort to avoid the necessity for such mandatory controls the Commission strongly recommends that specific fuel quality objectives be met. In Priority I and Priority II regions and in cities in Priority III regions with a population of more than 10,000 (based on the latest census) the Commission recommeds that no person use or provide for sale fuel having a sulfur content greater than that listed in the following table for use in residential and other fuel burning units not otherwise restricted by this regulation:

Effective Date	Percent Sulfur Content of Fuels	
	Coal	Oil
June 30, 1972	3.0	2.0
June 30, 1975	2.0	1.5
June 30, 1978	1.0	0.5

Section 10, Effective Date.

Regulation X (1978) shall become effective February 11, 1978, and shall supersede Regulation X (1976) which was adopted by the West Virginia Air Pollution Control Commission on the 4th day of November, 1976, and became effective December 10, 1976, which superseded Regulation X (1973) adopted by the West Virginia Air Pollution Control Commission on the 28th day of June, 1973, and became effective July 30, 1973, and Regulation X (1972) adopted by the West Virginia Air Pollution Control Commission on the 19th day of January, 1972, and became effective March 15, 1972.

REGULATION XI

PREVENTION OF AIR POLLUTION EMERGENCY EPISODES

Section 1. Intent and Purpose.

1.01. It is the intent of the Commission to provide a mechanism to prevent the buildup of air pollutant concentrations during periods of adverse meteorological conditions in which air pollutants may accumulate, thereby preventing the occurrence of an emergency due to the effects of these pollutants on health. To achieve this purpose, three (3) stages of criteria (pollutant concentration levels) have been established and specific emission reductions plans will be developed which will be initiated at each criteria stage to prevent further deterioration of the air supply in any air quality region or substantial portion thereof.

Section 2. Definitions.

2.01. "Air Pollution Episode" shall mean the occurrence of adverse meteorological conditions during which air pollutants accumulate, so that the population is exposed to an elevated concentration of airborne contaminants.

2.02. "Commission" shall mean the West Virginia Air Pollution Control Commission.

2.03. "Director" shall mean the director of the West Virginia Air Pollution Control Commission.

2.04. "COH" shall be the term used for the coefficient of haze. A COH unit is defined as that quantity of light-scattering solids (on the filter) which produces an optical density equivalent of 0.01 when measured by light transmission.

2.05. "Particulate Matter' shall mean any material, except uncombined water, that exists in a finely divided form as a liquid or solid.

2.06. "Photochemical Oxidant" shall be the term used to describe the net oxidizing ability of the ambient air.

2.07. "Standard Conditions" shall mean, for the purposes of this regulation, a temperature of 25°C and a pressure of 760 millimeters of mercury column.

2.08. "Region" shall mean a Federal Air Quality Control Region designated by the Secretary of Health, Education and Welfare or the Administrator of the Environmental Protection Agency.

2.09. "Person" shall mean any and all persons, natural or artificial, including any municipal, public or private corporation organized or existing under the laws of this or any other state or country, and any firm, partnership, or association of whatever nature.

2.10. "Priority" shall mean the numerical classification assigned to each Air Quality Control Region by the Environmental Protection Agency as follows:

REGION	POLLUTANT					
	Particulate	Sulfur Oxides	Carbon Monoxide	Nitrogen Dioxide	Photo-Chemical Oxidants	Hydro-Carbons
Region I	I	I	III	III	III	III
Region II	I	II	III	III	III	III
Region III	I	III	III	III	III	III
Region IV	I	III	III	III	III	III
Region V	III	III	III	III	III	III
Region VI	I	III	III	III	III	III
Region VII	I	I	III	III	III	III
Region VIII	III	III	III	III	III	III
Region IX	III	III	III	III	III	III
Region X	III	III	III	III	III	III

Section 3. Episode Criteria.

3.01. Conditions justifying the proclamation of an Air Pollution Alert or Air Pollution Warning shall be deemed to exist whenever the Director and/or Commission determines that the accumulation of air pollutants in any place is attaining or has attained levels which could, if such levels are exceeded, lead to an Air Pollution Emergency. In making this determination the Director and/or Commission shall be guided by the following criteria:

(a) Air Pollution Forecast.

An internal watch by the West Virginia Air Pollution Control Commission will be actuated by a National Weather Service advisory that an Atmospheric Stagnation Advisory is in effect or the equivalent local forecast of stagnant atmospheric conditions is issued by the Commission.

(b) Alert.

An alert shall be declared by the Director and/or Commission when any one of the following levels is reached at any monitoring site and meteorological conditions are such that pollutant concentrations can be expected to remain at these levels for twelve (12) or more hours or increase unless control actions are taken:

Sulfur Dioxide

800 micrograms per cubic meter (0.3 parts per million), 24 hour average

Particulate Matter

3.0 COHs, 24-hour average

Sulfur Dioxide and Particulate Matter Combined

Product of sulfur dioxide parts per million, 24-hour average, and COHs, 24-hour average, equal to 0.2

Carbon Monoxide

17 milligrams per cubic meter (15 parts per million), 8-hour average

Oxidant (O_3)

200 micrograms per cubic meter (0.1 parts per million), 1-hour average

Nitrogen Dioxide

282 micrograms per cubic meter (0.15 parts per million), 24-hour average

(c) Warning.

A warning shall be declared by the Commission when any one of the following levels is reached at any monitoring site and meteorological conditions are such that pollutant concentrations can be expected to remain at these levels for twelve (12) or more hours or increase unless control actions are taken:

Sulfur Dioxide

1600 micrograms per cubic meter (0.6 parts per million), 24-hour average

Particulate Matter

5COHs, 24-hour average

Sulfur Dioxide and Particulate Matter Combined

Product of sulfur dioxide parts per million, 24-hour average, and COHs, 24-hour average, equal to 0.8

Carbon Monoxide

34 milligrams per cubic meter (30 parts per million), 8-hour average

Oxidant (O_3)

800 micrograms per cubic meter (0.4 parts per million), 1-hour average

Nitrogen Dioxide

565 micrograms per cubic meter (0.3 parts per million), 24-hour average

(d) Emergency.

Conditions justifying the proclamation of an Air Pollution Emergency shall be deemed to exist whenever the Commission determines that the accumulation of air pollutants in any place has attained levels which require immediate action for the protection of the public health. The emergency level indicates that air quality is continuing to degrade and is approaching a level that should never be reached, and that the most stringent control actions are necessary. In making this determination, the Commission shall declare an emergency when any one of the following levels is reached at any monitoring site and meteorological conditions are such that this condition can be expected to continue for twelve (12) or more hours:

Sulfur Dioxide

2100 micrograms per cubic meter (0.8 parts per million), 24-hour average

Particulate Matter

7.0 COHs, 24-hour average

Sulfur Dioxide and Particulate Matter Combined

Product of sulfur dioxide parts per million, 24-hour average and COHs, 24-hour average, equal to 1.2

Carbon Monoxide

46 milligrams per cubic meter (40 parts per million), 8-hour average

Oxidant (O_3)

1200 micrograms per cubic meter (0.6 parts per million), 1-hour average

Nitrogen Dioxide

750 micrograms per cubic meter (0.4 parts per million), 24-hour average

An emergency will be declared by an order entered by the Commission with the written approval of the Governor.

(e) Termination.

Once declared, any status reached by application of these criteria will remain in effect until the criteria for that level are no longer met. At such time, the next lower status will be assumed.

3.02. The episode criteria presented in Section 3.01 establish the basis for emission control action to be initiated to prevent an Air Pollution Emergency Episode. The stringent control actions required in Section 6 when the emergency stage has been declared are designed to prevent air pollutant concentrations from reaching levels which, in the judgment of the Commission, could constitute imminent and substantial endangerment to health. These levels are as follows:

Sulfur Dioxide

2620 micrograms per cubic meter (1.0 parts per million), 24-hour average

Particulate Matter

1000 micrograms per cubic meter or 8 COHsm 24-hour average

Sulfur Dioxide and Particulate Matter Combined

Product of sulfur dioxide in micrograms per cubic meter, 24-hour average, and particulate matter in micrograms per cubic meter, 24-hour average, equal to 490 X 10^3; or product of sulfur dioxide in parts per million, 24-hour and COHs, 24-hour average, equal to 1.5

Carbon Monoxide

57.5 milligrams per cubic meter (50 parts per million), 8-hour average

86.3 milligrams per cubic meter (75 parts per million), 4-hour average

144 milligrams per cubic meter (125 parts per million), 1-hour average

Photochemical Oxidants

800 micrograms per cubic meter (0.4 parts per million), 4-hour average

1200 micrograms per cubic meter (0.6 parts per million), 2-hour average

1400 micrograms per cubic meter (0.7 parts per million), 1-hour average

Nitrogen Dioxide

938 micrograms per cubic meter (0.5 parts per million), 24-hour average

3750 micrograms per cubic meter (2.0 parts per million), 1-hour average

Section 4. Methods of Measurement.

4.01. Sulfur dioxide concentrations shall be determined by any of the methods listed below or by such other methods approved as equally or more specific, accurate, sensitive, and reproducible by the West Virginia Air Pollution Control Commission:

(a) Utilization of the West-Gaeke (paraosaniline) method as modified by Scaringelli, et al.

(b) The use of a continuous sampling and recording instrument based on coulometric, colorimetric, or an equivalent principle and utilizing the modified West-Gaeke analytical procedure as a standard means of calibration.

4.02. Suspended particulate matter concentrations shall be determined by any of the methods listed below or by such other methods approved as equally or more specific, accurate, sensitive, and reproducible by the West Virginia Air Pollution Control Commission:

(a) Filter Tape Sampler

(b) High-Volume Filtration

4.03. Carbon monoxide concentrations shall be determined by non-dispersive infrared (NDIR) methods or by such other methods approved as equally or more specific, accurate, sensitive, and reproducible by the West Virginia Air Pollution Control Commission.

4.04. Photochemical oxidant concentrations shall be determined by the neutral buffered potassium iodide method as modified by Saltman, et al., or by such other methods approved as equally or more specific,accurate, sensitive, and reproducible by the West Virginia Air Pollution Control Commission.

4.05. Nitrogen dioxide concentrations shall be determined by any of the methods listed below or by such other methods approved as equally or more specific, accurate, sensitive, and reproducible by the West Virginia Air Pollution Control Commission.

(a) Utilization of Jacobs-Hocheiser method

(b) The use of a continuous sampling and recording instrument based on coulometric, colorimetric, or an equivalent principle

Section 5. Preplanned Reduction Strategies.

5.01. Any person responsible for the operation of a stationary source of air pollutants emitting 100 tons (90.7 metric tons) per year or more in a region classified Priority I or II for any pollutant, shall prepare standby plans for reducing the emission of air pollutants during periods of an Air Pollution Alert, Air Pollution Warning, and Air Pollution Emergency. Standby plans shall be designed to reduce or eliminate emission of air pollutants in accordance with the objectives set forth in Tables I, II, and III.

5.02. Any person responsible for the operation of a source of air pollutants not set forth under Section 5.01 shall, when requested by the Commission, prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III.

5.03. Standby plans as required under Sections 5.01 and 5.02 shall be in writing and shall include, but not be limited to, identifying the sources of air pollutants, the approximate amount of reduction of pollutants, and a brief description of the manner in which the reduction will be achieved during an Air Pollution Alert, Air Pollution Warning, and Air Pollution Emergency. Such information shall be filed on forms and in a manner acceptable to the Director.

5.04. During a condition of Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency, standby plans as required by this section shall also be made available on the premises to the Director or his duly authorized representative.

5.05. Standby plans as required by this section shall be submitted to the Director upon request within sixty (60) days of the receipt of such request. All standby plans shall be subject to review and approval by the Commission. If, in the opinion of the Commission, a standby plan does not effectively carry out the objectives as set forth in Tables I, II, and III, the Commission may disapprove it, state its reason for disapproval, and order the preparation of an amended standby plan within the time period specified in the order.

Section 6. Emission Reduction Plans.

(a) Air Pollution Forecast.

When the National Weather Service issues a public announcement that an Atmospheric Stagnation Advisory is in effect or the equivalent local forecast of stagnant atmospheric conditions is issued by the West Virginia Air Pollution Control Commission, no open burning shall be conducted.

(b) Air Pollution Alert.

When an Air Pollution Alert is declared in the manner provided in Section 3.01 (b), any person responsible for the operation of a source, who is required under Section 5 to have standby plans, shall put into effect the pre-planned abatement strategy for an Air Pollution Alert when notified by the Director or his duly authorized representative. All other persons responsible for the operation of sources of air pollution shall take actions as required in Table I.

(c) Air Pollution Warning.

When an Air Pollution Warning is declared in the manner provided in Section 3.01 (c), any person responsible for the operation of a source, who is required under Section 5 to have standby plans, shall put into effect the preplanned abatement strategy for an Air Pollution Warning when notified by the Director or his duly authorized representative. All other persons responsible for the operation of sources of air pollutants shall take actions as required in Table II.

(d) Air Pollution Emergency.

When an Air Pollution Emergency is declared in the manner provided in Section 3.01 (d), any person responsible for the operation of a source, who is required under Section 5 to have standby plans, shall put into effect the preplanned abatement strategy for an Air Pollution Emergency when notified by the Director or his duly authorized representative of such emergency. All other persons responsible for the operation of sources of air pollutants shall take actions as required in Table III.

(e) When the Director and/or Commission determines that a specified criteria level has been reached at one or more monitoring sites solely because of emissions from a limited number of sources, the Director shall notify such source(s) that the preplanned abatement strategies of Tables I, II, and III or the standby plans are required, insofar as it applies to such source(s), and shall be put into effect until the criteria of the specified level are no longer met.

TABLE I - EMISSION REDUCTION PLANS

Alert Level

Part A. General

1. There shall be no open burning by any persons of tree waste, vegetation, refuse, or debris in any form.

2. The use of incinerators for the disposal of any form of solid waste shall be limited to the hours between 12 noon and 4 p.m.

3. Persons operating motor vehicles should eliminate all unnecessary operations.

4. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12 noon and 4 p.m.

Part B. Source Curtailment

Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this Alert Level:

	Source of Air Pollution		Control Action
1.	Coal or oil-fired electric power generating facilities	a.	Substantial reduction by utilization of fuels having low ash and sulfur content
		b.	Substantial reduction by diverting electric power generation to facilities outside of Alert Area
		c.	Maximum utilization of midday (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing

TABLE I (Continued)

Source of Air Pollution	Control Action
2. Coal and oil-fired process steam generating facilities	a. Substantial reduction by utilization of fuels having low ash and sulfur content
	b. Substantial reduction of steam load demands consistent with continuing plant operations
	c. Maximum utilization of midday (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing
3. Manufacturing industries of the following classifications: Primary Metals Industry Petroleum Refining Operations Chemical Industries Mineral Processing Industries Paper and Allied Products Grain Industry	a. Substantial reduction of air pollutants from manufacturing operations by curtailing, post-poning, or deferring production and allied operations
	b. Maximum reduction by deferring trade waste disposal operations which emit solid particles, gases, vapors, or malodorous substances
	c. Maximum reduction of heat load demands for processing
	d. Maximum utilization of midday (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing

TABLE II - EMISSION REDUCTION PLANS

Warning Level

Part A. General

1. There shall be no open burning by any persons of tree waste, vegetation, refuse, or debris in any form.
2. The use of incinerators for the disposal of any form of solid waste or liquid waste shall be prohibited.
3. Persons operating motor vehicles must reduce operations by the use of car pools and increased use of public transportation and elimination of unnecessary operation.
4. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12 noon and 4 p.m.

Part B. Source Curtailment

Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this Warning Level:

	Source of Air Pollution		Control Action
1.	Coal or oil-fired electric power generating facilities	a.	Maximum reduction by utilization of fuels having lowest ash and sulfur content
		b.	Maximum reduction by diverting electric power generation to facilities outside of Warning Area
		c.	Maximum utilization of midday (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing

TABLE II (Continued)

	Source of Air Pollution		Control Action
2.	Coal and oil-fired process steam generating facilities	a.	Maximum reduction by utilization of fuels having lowest available ash and sulfur content
		b.	Substantial reduction of steam load demands consistent with continuing plant operations
		c.	Making ready for use a plan of action to be taken if an emergency develops
		d.	Maximum utilization of midday (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing
3.	Manufacturing industries which require considerable lead time for shut-down including the following classifications: Petroleum Refining Chemical Industries Primary Metals Industries Glass Industries Paper and Allied Products	a.	Maximum reduction of air contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardships by postponing production and allied operations
		b.	Maximum reduction by deferring trade waste disposal operations which emit solid particles, gases, vapors, or malodorous substances
		c.	Maximum reductions of heat load demands for processing

TABLE II (Continued)

Source of Air Pollution	Control Action
	d. Maximum utilization of midday (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing
4. Manufacturing industries which require relatively short lead times for shutdown including the following classification: Primary Metals Industries Chemical Industries Mineral Processing Industries Grain Industry	a. Elimination of air pollutants from manufacturing operations by ceasing, curtailing, postponing, or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment
	b. Elimination of air pollutants from trade waste disposal processes which emit solid particles, gases, vapors, or malodorous substances
	c. Maximum reduction of heat load demands for processing
	d. Maximum utilization of midday (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing

TABLE III- EMISSION REDUCTION PLANS

Emergency Level

Part A. General

1. There shall be no open burning by any persons of tree waste, vegetations, refuse, or debris in any form.
2. The use of incinerators for the disposal of any form of solid or liquid waste shall be prohibited.
3. All places of employment described below shall immediately cease operations:
    a. Mining and quarrying of nonmetallic minerals
    b. All construction work except that which must proceed to have in force an air pollution emergency plan
    c. All manufacturing establishments except those required to have in force an air pollution emergency plan
    d. All wholesale trade establishments, i.e., places of business primarily engaged in selling merchandise to retailers, or industrial, commercial, institutional or professional users, or to other wholesalers, or acting as agents in buying merchandise for or selling merchandise to such persons or companies, except thoses engaged in the distribution of drugs, surgical supplies and food
    e. All offices of local, county, and State government including authorities, joint meetings, and other public bodies except such agencies which are determined by the chief administrative officer of local, county, or State governmnent, authorities, joint meetings and other public bodies to be vital for public safety and welfate and the enforcement of the provisions of this order
    f. All retail trade establishments except pharmacies, surgical supply distributors, and stores primarily engaged in the sale of food

TABLE III (Continued)

g. Banks, credit agencies other than banks, securities and commodities brokers, dealers, exchanges and services; offices of insurance carriers, agents and brokers, real estate offices

h. Wholesale and retail laundries, laundry services and cleaning and dyeing establishments; photographic studios; beauty shops, barber shops, shoe repair shops

i. Advertising offices; consumer credit-reporting, adjustment and collection agencies; duplicating, addressing, blueprinting, photocopying, mailing, mailing list and stenographic services; equipment rental services, commercial testing laboratories

j. Automobile repair, automobile services, garages

k. Establishments rendering amusement and recreational services including motion picture theaters

l. Elementary and secondary schools, colleges, universities, professional schools, junior colleges, vocational schools, and public and private libraries

4. All commercial and manufacturing establishments not included in this order will institute such actions as will result in maximum reduction of air pollutants from their operation by ceasing, curtailing, or postponing operations which emit air pollutants to the extent possible without causing injury to persons or damage to equipment.

5. The use of motor vehicles is prohibited except in emergencies with the approval of local or State police.

Part B. Source Curtailment

Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this Emergency Level:

TABLE III (Continued)

	Source of Air Pollution		Control Action
1.	Coal or oil-fired electric power generating facilities	a.	Maximum reduction by utilization of fuels having lowest ash and sulfur content
		b.	Maximum reduction by diverting electric power generation to facilities outside of Emergency Area
		c.	Maximum utilization of midday (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing
2.	Coal and oil-fired process steam generating facilities	a.	Maximum reduction by reducing heat and steam demands to absolute necessities consistent with preventing equipment damage
		b.	Taking the action called for in the emergency plan
		c.	Maximum utilization of midday (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing
3.	Manufacturing industries of the following classifications: Primary Metals Industries Petroleum Refining Chemical Industries Mineral Processing Industries Grain Industry Paper and Allied Products	a.	Elimination of air pollutants from manufacturing operations by ceasing, curtailing, postponing, or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment

TABLE III (Continued)

3. (Continued)	b. Elimination of air pollutants from trade waste disposal processes which emit solid particles, gases, vapors, or malodorous substances
	c. Maximum reduction of heat load demands for processing
	d. Maximum utilization of midday (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing

Section 7. Air Pollution Emergencies; Contents of Order; Hearings; Appeals.

As is provided in Chapter 16, Article 20, Section 10 of the Code of West Virginia, as amended, if the Commission, with the written approval of the Governor, shall hereafter enter an order declaring an Air Pollution Emergency, as provided in Section 3.01 (d) hereof, it shall, in such order, direct what action shall be taken by the Director to bring about the reduction or prevention of emissions substantially contributing to said Emergency. In such order the Commission shall also fix a time (which shall be not later than twenty-four (24) hours from the time of entry of such order) and place for a hearing to be held be the Commission for the purpose of investigating and determining the factors bearing upon the existence of and contribution to the alleged emergency.

A true copy of any such order shall be served upon all persons whose interests are directly prejudiced by such order in the same manner as a summons in a civil action may be served, and a true copy shall also be posted on the front door of the courthouse of the county in which the alleged emergency conditions originated. All persons whose interests are prejudiced or affected in any manner by any such order shall have the right to appear in person or by counsel at such hearing and to present relevant evidence. Within twenty-four (24) hours after the completion of the hearing, the Commission shall affirm, modify or set aside said order in accordance and consistent with the evidence adduced at such hearing.

Any person aggrieved by any such final action of the Commission may thereafter exercise the rights of judicial review and appeal which are set forth in the statute hereinabove cited.

Section 8. Effective Date.

Regualtion XI shall become effective March 15, 1972.

REGULATION XII

AMBIENT AIR QUALITY STANDARD FOR NITROGEN DIOXIDE

Section 1. Anti-Degradation Policy.

1.01. In the best interests of the State of West Virginia, it is the objective of the Commission to obtain and maintain the cleanest air possible, consistent with the best available technology.

Where the present ambient air is of better quality than the established standards, the Commission will develop long-range plans to protect the difference between the present quality and the established standards. The plans will be based upon the best available forecasts of probable land and air used in such areas of high air quality.

The air quality of these areas will not be lowered unless it has been clearly demonstrated to the Commission that such a change is justifiable as a result of necessary economic or social development and will not result in a statutory air pollution.

This will require that any industrial, public, or private project of development which could constitute a new source of air pollutants, within an area of such high air quality, provide the best practicable control available under existing technology as part of the initial project.

Section 2. Definitions.

2.01. "Air Pollutants" shall mean solids, liquids, or gases which, if discharged into the air, may result in a statutory air pollution.

2.02. "Air Pollution", 'statutory air pollution', shall have the meaning ascribed to it in Section Two of Chapter Sixteen, Article Twenty of the Code of West Virginia, as amended.

2.03. "Commission' shall mean the West Virginia Air Pollution Control Commission.

2.04. "Person" shall mean any and all persons, natural or artificial, including any municipal, public, or private corporation organized or existing under the law of this or any other state or country, and any firm, partnership, or association of whatever nature.

2.05. "Standard Condtitions" shall mean, for the purposes of this regulation, a temperature of 25°C and a pressure of 760 milli-meters of mercury column.

2.06. "Ambient Air Quality Standard" shall mean the numerical expression of a specified concentration level for a particular air pollutant in the ambient air and the time-averaging interval over which that concentration level is measured.

Section 3. Ambient Air Quality Standard

3.01. The following ambient air quality standard shall not be exceeded at any sampling site:

Nitrogen Dioxide

Annual Arithmetic Mean - 100 micrograms per cubic meter (0.05 parts per million)

Section 4. Methods of Measurement.

4.01. Nitrogen dioxide concentrations shall be determined by any of the methods listed below or by such other methods approved as equally of more specific, accurate, sensitive, and reproducible by the West Virginia Air Pollution Control Commission:

(a) The Jacobs-Hocheiser method

(b) The use of a continuous sampling and recording instrument based on coulometric, colorimetric, or an equivalent principle.

Section 5. Effective Date.

Regulation XII shall become effective March 15, 1972.

REGULATION XIII

PERMITS FOR CONSTRUCTION, MODIFICATION, OR RELOCATION OF STATIONARY SOURCES OF AIR POLLUTANTS, AND PROCEDURES FOR REGISTRATION AND EVALUATION

Section 1. Intent and Purpose.

1.01. To insure the attainment and maintenance of West Virginia's primary and secondary ambient air quality standards; to protect the difference between the present air quality and the secondary standards in areas of high air quality; and to insure compliance with West Virginia's emission standards, it is the intent of the Commission to register and evaluate sources of air pollutants and to preclude the construction, modification, or relocation of any direct and/or indirect affected source(s) in any locality, in which the establishment of such source(s) may interfere with the attainment or maintenance of these standards, or which would lower the air quality in any area unless it has been clearly demonstrated to the Commission that such change is justifiable as a result of necessary economic or social development and will not result in a statutory air pollution.

The purpose of this regulation is to set forth the procedures for registration and reporting, and the criteria for obtaining a permit to construct a new direct and/or indirect affected source within the State of West Virginia. Such construction, modification, or relocation without such a permit is a violation of this regulation. Sources covered by this regulation are termed a direct or indirect 'affected source' as herein defined.

Section 2. Definitions.

2.01. "Air Pollutants" shall mean solids, liquids, or gases which, if discharged into the air, may result in a statutory air pollution.

2.02. "Discharge" shall refer to the release, escape, or emission of air pollutants into the air.

2.03. "Air Pollution", 'statutory air pollution', shall have the meaning ascribed to it in Section Two of Chapter Sixteen, Article Twenty of the Code of West Virginia, as amended.

2.04. "Commission" shall mean the West Virginia Air Pollution Control Commission.

2.05. "Director" shall mean the director of the West Virginia Air Pollution Control Commission.

2.06. "Person" shall mean any and all persons, natural or artificial, including any municipal, public or private corporation organized or existing under the laws of this or any other state or country, and any firm, partnership, or association of whatever nature.

2.07. "Construction" shall mean the fabrication, erection, or installation of a direct or indirect affected source. For the purposes of this regulation, an expansion of an existing direct affected source which increases the amount of any discharge or results in any new discharge shall be considered construction.

2.08. "Modification" for the purposes of this regulation is defined as follows:

(a) "Direct Affected Source Modification" shall mean any physical change in, or change in the method of operation of, an existing direct affected source which increases the amount of any discharge from such existing source or results in any new discharge from such existing source, for which the Commission has promulgated an emission or ambient air quality standard. However, the following actions shall not constitute a modification of a direct affected source:

(1) An expansion of an existing direct affected source;

(2) Routine maintenance, repair, and replacement;

(3) An increase in hours of operation;

(4) An increase in the production rate if such increase does not exceed the design capacity of the affected source; or

(5) Use of an alternative fuel or raw material, provided that prior to the effective date of this regulation the affected source is designed to accommodate such alternative use without increasing emissions.

(b) "Indirect Affected Source Modification";

(1) Any change is a parking facility located in a Standard Metropolitan Statistical Area which increases the parking capacity of such facility by more than 500 cars;

(2) Any change in a parking facility located outside of a Standard Metropolitan Statistical Area which increases the parking capacity of such facility by more than 1,000 cars;

(3) Any change which is predicted by a method approved by the Director to increase the average annual daily traffic volume on a road or highway section located within a Standard Metropolitan Statistical Area by 10,000 vehicles per day or more within ten (10) years of modification; or

(4) Any change in an airport which is predicted by a method approved by the Director to result within ten (10) years of modification in an increase of 50,000 or more takeoffs or landings per year by any scheduled air carriers over the existing volume of takeoffs or landings, or increase of 1,600,000 or more passengers per year.

2.09. "Relocation" shall mean the physical movement of a direct and/or indirect affected source outside its existing plant boundaries.

2.10. "Commenced" shall mean that an owner or operator has undertaken a continuous program of physical site preparation, construction, modification, or relocation, or that a binding general construction contract has been entered into which obligates one party to such contract to perform the physical work involved in such program of construction, modification, or relocation of a direct and/or indirect affected source. Interruptions resulting from acts of God, strikes, or other matters beyond the control of the owner shall be disregarded in determining whether a construction, modification, or relocation program is continuous.

2.11. "Direct Affected Source"

(a) Except for the exemptions of Sub-Section 2.11(b), for the purpose of this regulation, a 'direct affected source' shall mean:

(1) Any stationary source subject to any emission regulation promulgated by the Commission; or

(2) Any stationary source which discharges, or may discharge more than six (6) pounds per hour of any air pollutant for which the Commission has promulgated an ambient air quality standard; or

(3) Any source discharging, or which may discharge, a hazardous pollutant(s) as defined by the Commission.

(b) However, for the purpose of this regulation, a 'direct affected source' shall not mean:

(1) Any fuel burning unit having a heat input under ten (10) million B.T.U.'s (British Thermal Units) per hour;

(2) Any internal combustion engines;

(3) Any normal and necessary operation associated with the production of agricultural products grown on the premises or livestock, dogs, cats, and poultry grown on the premises; or

(4) Any other source of minor significance as may be specified by the Commission.

2.12. "Indirect Affected Source"

For the purpose of this regulation an "indirect affected source" shall mean:

(a) Any new parking area located in a Standard Metropolitan Statistical Area with a capacity of 1,000 or more cars;

(b) Any new parking area located outside of a Standard Metropolitan Statistical Area with a capacity or 2,000 cars of more;

(c) Any new airport which is predicted by a method approved by the Director to have 50,000 or more takeoffs or landings per year by regularly scheduled air carriers, or use by 1,600,000 or more passengers per year; or

(d) Any new road or highway section located inside a Standard Metropolitan Statistical Area which is predicted by a method approved by the Director to have an average annual daily traffic volume within ten (10) years of construction of 20,000 or more vehicles per day.

2.13. "Standard Metropolitan Statistical Area" shall mean any county or group of counties which contain at least one city of 50,000 inhabitants or more, or twin cities with combined total population of 50,000 inhabitants or more, and any contiguous counties which are socially and economically integrated with the central city.

2.14. "Stationary Source" shall mean, for the purpose of this regulation, any building, structure, facility, or installation, or combination thereof, whcih may directly emit or indirectly cause to be emitted any air pollutant. Two designated classes of stationary sources shall be "direct affected source" and "indirect affected source".

Other words and phrases used in this regulation, unless otherwise indicated, shall have the meaning ascribed to them in Chapter Sixteen, Article Twenty, Section Two of the Code of West Virginia, 1931, as amended, and any rules or regulations promulgated thereunder;

Section 3. Registration and Report Requirements for Direct Affected Sources on which Construction, Modification, or Relocation Commenced Prior to the Effective Date of this Regulation.

3.01. Not later than one hundred twenty (120) days after the effective date of this regulation all persons owning and/or operating a direct affected source(s) shall register such source(s) with the Commission unless such source(s) has been previously registered.

The information required for registration shall be determined and provided in the manner and on such forms as specified by the Director. Registration forms shall be requested from the Director, or his duly authorized representative, by the owner and/or operator of such source(s).

3.02. The owner and/or operator of such a direct affected source shall maintain data on the operation of the source and the Director, or his duly authorized representative, may request reports on such data in such resonable manner and detail as the Director may specify. If requested, such reports shall be filed within fifteen (15) days of the end of the established reporting period. However, reports on such data shall not exceed one (1) per month.

Section 4. Permit Application and Report Requirements for Direct and/or Indirect Affected Sources on which Construction, Modification, or Relocation is Commenced After the Effective Date of this Regulation.

4.01. No person shall cause, suffer, allow, or permit the construction, modification, or relocation of any direct and/or indirect affected source(s) to be commenced after the effective date of this regulation without notifying the Director of such intent and obtaining a permit(s) to so construct, modify, or relocate the direct and/or indirect affected source(s) as herein provided. Where an indirect affected source is constructed, modified, or relocated in increments which individually are not subject to the provisions of this regulation, all such increments occuring since the effective date of this regulation shall be added together for determining the applicability of this regulation.

4.02. Not later than ninety (90) days, for construction or modification of a direct and/or indirect affected source or for relocation of an indirect affected source, or forty-five (45) days for relocation of a direct affected source , prior to the time that such construction, modification, or relocation is commenced, the owner or operator of the source shall file with the Director permit application forms available from the Director. These applications shall contain sufficient information as, in the judgment of the Director, will enable him to determine whether such souce construction, modification, or relocation will be in conformance with the provisions of any rules and regulations promulgated by the Commission. Such information may include, but not be limited to, site information, plans, descriptions, specifications, and drawings relating to the proposed construction, modification, or relocation of the direct and/or indirect affected source and the manner in which it will be operated and controlled.

4.03. Each permit application shall be signed by the owner or operator of the direct and/or indirect affected source, and such signature shall constitute an agreement that the applicant will assume responsibility for the construction, modification, relocation, or operation of the direct and/or indirect affected source in accordance with applicable rules and regulations of the Commission.

4.04. Within ninety (90) days of the receipt of a permit application for construction or modification of a direct and/or indirect affected source or for relocation of an indirect affected source, or within forty-five (45) days, for relocation of a direct affected source, the Director shall issue such permit unless he determines that the proposed construction, modification, or relocation will violate applicable emission standards, will interfere with the attainment or maintenance of applicable ambient air quality standards, or will be inconsistent with the intent and purpose of this regulation, in which case he shall issue an order for the prevention of such construction, modification, or relocation. Failure to issue the permit or such order within the time prescribed shall be deemed a determination that such construction, modification, or relocation may proceed: provided that it is in accordance with the plans and specifications or other information required to be submitted on the application required herein.

4.05. When the Director denies a permit application for the proposed construction, modification, or relocation of any direct and/or indirect affected source, the order shall set forth his reasons with reasonable specificity.

4.06. The Director may impose any reasonable conditions as part of a granted construction, modification, or relocation permit. Such conditions may include, but not be limited to, the submission of periodic progress or operation reports, the provisions of a suitable sampling site, and the installation of pollutant monitoring devices.

Section 5. Determination of Compliance of Direct Affected Sources With Commission Rules and Regulations.

5.01. At the time a direct affected source is alleged to be in compliance with an applicable emission standard, an appropriate test consisting of visual determinations and/or conventional in-stack measurements or such other tests as the Director may specify shall be conducted to determine such compliance.

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5.02. At the request of the Commission the owner and/or operator of a direct affected source shall install such stack gas monitoring devices as the Director deems necessary to determine continuing compliance. The data from such devices shall be readily available at the source location or such other reasonable location that the Director may specify. At the request of the Director, or his duly authorized representative, such data shall be made available for inspection or copying. Failure to promptly provide such data shall constitute a violation of this regulation.

Section 6. Public Review Procedures for Direct Affected Sources

6.01. The Director shall maintain for public review a permit application list for direct affected sources containing the name of the applicant, the type and location of the source, and the proposed startup date. No permit shall be issued to any applicant until he has been on the permit application list for at least thirty (30) days for construction of modification, or twenty-five (25) days for relocation.

6.02. At the same time that an application for a direct affected source permit is filed with the Director, the applicant shall also place a legal advertisement in the paper of general circulation in the area where the source is located. The advertisement shall contain, as a minimum, the name of the applicant, the type and the location of the source, and the proposed startup date.

6.03. During the time periods specified in Sub-Section 6.01 that an applicant's name appears on the direct affected source permit application list, the Director will receive and evaluate written comments relating to the permit application.

Section 8. Public Meetings.

8.01. Public meetings to receive comments on direct and/or indirect permit applications will be held when the Director deems it appropriate or when substantial interest is expressed, in writing, by a significant number of persons who might reasonably be expected to be affected by the source in question.

8.02. The Director, the Commission, or a duly authorized employee of the Commission shall preside over such meetings and insure that all interested parties have ample opportunity to present comments. Such meetings shall be held at a convenient place as near as practicable to the location of the proposed source.

8.03. At a reasonable time prior to such meetings, the Director shall provide appropriate information to news media in the area where the proposed source is to be located.

Section 9. Permit Transfer, Cancellation, and Responsibility

9.01. A permit shall not be transferable.

9.02. The Director will cancel or suspend a permit if, after six (6) months from the date of issuance the holder of the permit cannot provide the Director, at the Director's request, with written proof of a good faith effort that such construction, modification, or relocation has commenced. Such proof shall be provided not later than thirty (30) days after the Director's request.

9.03. The Director may cancel or suspend a permit if the plans and specifications upon which the approval was based and/or the conditions established in the permit are not adhered to.

9.04. Possession of a permit does not relieve any person of the responsibility of complying with any and all applicable rules or regulations of the Commission or any other governmental agency.

Section 10. Conflict With Other Rules or Regulations.

10.01. When a provision of this regulation conflicts with a similar portion(s) of any rule or regulation previously adopted by the Commission, the provision(s) of this regulation shall apply.

Section 11. Effective Date.

Regulation XIII (1974) shall become effective June 1, 1974, and shall supersede Regulation XIII (1972) which was adopted by the West Virginia Air Pollution Control Commission on the 5th day of May, 1972, and became effective June 15, 1972, and was filed with the Secretary of State May 11, 1972.

Regulation XVII - To Prevent and Control Particulate Air Pollution From Materials Handling, Preparation, Storage and Sources of Fugitive Particulate Matter.

Section 1. Intent.

To insure the attainment and maintenance of West Virginia's ambient air quality standards, it is the intent of the Commission to evaluate sources of fugitive particulate matter and to prevent such sources from jeopardizing the attainment or maintenance of these standards by requiring the application of the best control methods or technology practicable.

The Commission particularly urges the cooperation of municipalities in utilizing street sweepers equipped with dust capturing equipment, on a regular basis, to minimize particulate matter reentrainment into the air from heavily trafficked streets. In addition, municipalities should take such action as necessary to control fugitive particulate matter emissions arising from unpaved streets, access roads, private parking lots, and any other such sources of uncontrolled particulate matter.

It is the intent of the Commission that fugitive particulate matter sources be controlled in a timely and progressive manner, so that all such sources are in compliance with this regulation as soon as possible, but not later than December 31, 1982.

Section 2. Area Affected.

The County of Kanawha; and the Magisterial Districts of Valley (Fayette County), Scott and Pocatalico (Putnam County), Tygart (Wood County), the City of Fairmont and those portions of Union and Winfield Magisterial Districts west of Interstate I-79 (Marion County).

Section 3. Definitions.

3.01. "Air Pollution", 'statutory air pollution', shall have the meaning ascribed to it in Section Two of Chapter Sixteen, Article Twenty of the Code of West Virginia, as amended.

3.02. "Commission" shall mean the West Virginia Air Pollution Control Commission.

3.03. "Director" shall mean the Director of the West Virginia Air Pollution Control Commission.

3.04. "Person" shall mean any and all persons, natural or artificial, including any municipal, public or private corporation organized or existing under the laws of this or any other state or country, and any firm, partnership, or association of whatever nature.

3.05. "Particulate Matter" shall mean any material except uncombined water that exists in a finely divided form as a liquid or solid.

3.06. "Opacity" shall mean the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

3.07. "Air Pollutants" shall mean solids, liquids, or gases which, if discharged into the air, may result in a statutory air pollution.

3.08. "Air Pollution Control Equipment" shall mean any equipment used for collecting, converting or suppressing particulate matter for the purpose of preventing or reducing discharge of such particulate matter into the open air.

3.09. "Materials Handling and Preparation Activity" shall include, but not be limited to, the crushing, grinding, breaking, conveying, loading, unloading, transferring and classifying of materials.

3.10. "Fugitive Particulate Matter", for the purpose of this regulation, shall mean that particulate matter which becomes airborne from activities associated with the transporting of materials, disposal areas, haul roads, plant grounds, public, private, and industrial parking areas or lots, public and private streets and highways, mobile drills, construction and demolition and similar activities.

3.11. "Materials" shall include, but not be limited to, limestone, dolomite, iron ore, slag, coke, coal, sandstone, magnetite, sinter, sand, coal refuse, soda ash, ash, cement, or earth.

3.12. "Disposal Area" shall mean any area where waste material is deposited for disposal. Such waste material shall include, but not be limited to, coal refuse, ash, material collected by air pollution control equipment, process overload discharges, building demolition wastes, contaminated products and materials.

Other words and phrases used in this regulation, unless otherwise indicated, shall have the meaning ascribed to them in Section Two of Chapter Sixteen, Article Twenty of the Code of West Virginia, as amended.

Section 4. Control and Prohibition of Particulate Emissions From Materials Handling, Preparation and Storage.

4.01. No person shall cause, suffer, allow, or permit the discharge of particulate matter from any materials handling and/or preparation activity in excess of ten (10%) percent opacity averaged over a six (6) minute period.

4.02. No person shall cause, suffer, allow or permit the sustained discharge of particulate matter into the open air in such a manner as to be visible from any inactive storage pile.

Control measures that should be utilized in the storage of materials include, but are not limited to, the use of wetting and surface bonding agents, partial or total enclosures or draping of material on storage piles, or storage of materials in silos or bins with air pollution control equipment installed to prevent particulate emissions that are displaced by air during loading and/or unloading operations.

4.03. Where any air pollution control equipment or fugitive particulate matter suppression system utilizes water in its operation, such equipment shall be designed for all-weather use.

Section 5. Control of Particulate Emissions From Disposal Areas.

No person shall cause, suffer, allow or permit the sustained air entrainment of particulate matter from a disposal area; except at such portions of the disposal area where depositing and/or loading out activity takes place. Good practice must be utilized to disturb only the smallest part of a disposal area possible for such activities. Section 4.01 of this regulation shall apply to materials deposition and/or loading out activities.

Section 6. Control of Fugitive Particulate Matter Emissions From Roads, Haul Ways and Parking Lots.

As determined by the Commission, a person may be required to minimize particulate matter air entrainment from vehicle activity or natural wind effects on haul ways, haul roads, parking lots and other surfaces.

Section 7. Control and Prohibition of Fugitive Particulate Matter Emissions From Vehicles.

No person shall cause, suffer, allow or permit a vehicle to be driven or moved on any public or private street, road, alley, highway or other thoroughfare unless such vehicle is so constructed or its cargo treated in such a manner as to prevent its contents from dripping, sifting, leaking or otherwise escaping therefrom, so as not to create conditions which result in particulate matter becoming airborne.

Section 8. Control and Prohibition of Fugitive Dust Emissions From Construction or Demolition Activities.

No person shall cause, suffer, allow or permit the sustained escape of particulate matter into the open air from any construction, demolition site or abrasive cleaning operation that, in the judgment of the Commission, will have an adverse effect on the ambient air quality. Such control measures as necessary shall be applied to prevent fugitive particulater matter emissions from such sources. Control measures may include adequate containment methods for abrasive cleaning operations, liquid treatment of haul roads and other surfaces, covering of material transport vehicles, the prompt removal of tracked material from roads or streets, or other control measures specified by the Commission.

Section 9. Control Programs and Schedules.

9.01. Any person operating a facility in violation of the provisions of this regulation shall present a control program upon the request of the Commission. The control program shall be embodied in a consent order as provided in Chapter Sixteen, Article 20, Section 5 (17) of the Code of West Virginia, as amended.

9.02. To the extent allowed by law and as requested by the Commission, each municipality and county commission shall present such plans and programs as necessary to provide for the scheduled control and reduction of fugitive particulate matter by the activities regulated by this regulation that are under their jurisdiction.

Such programs shall be submitted in such reasonable time as ordered by the Commission and shall be progressive in nature so as to implement the earliest possible control of fugitive particulate matter into a schedule which meets the requirements of this regulation.

Such schedules of compliance by that municipality or county commission shall be entered into a binding consent order between the municipality or county commission and the Commission.

Section 10. Registration and Reporting.

At such reasonable times as the Director may designate, persons owning or operating facilities involving materials handling, preparation and storage, disposal areas or other sources of fugitive particulate matter as covered by this regulation, may be required to register such sources with the Commission and/or furnish periodic reports concerning such activities or sources.

Section 11. Variance.

Because of temporary conditions beyond the control of any person, a variance may be granted up to ten (10) days upon presentation of sufficient evidence to the

Director. Variances of over ten (10) days may be granted by the Commission, provided a corrective program has been submitted by the person requesting said variance.

Section 12. Conflict With Other Regulations.

When a provision of this regulation conflicts with similar portion(s) of any other rule or regulation previously adopted by the Commission, the most stringent provision or requirement will apply.

Section 13. Effective Date.

Regulation Series XVII (1979) was adopted by the Commission on the 23rd day of February, 1979, and shall become effective the 1st day of May, 1979.

Regulation XVIII - To Prevent and Control Particulate Air Pollution From Direct Meat-Firing Devices.

Section 1. Definitions.

1.01. "Air Pollution", 'statutory air pollution', shall have the meaning ascribed to it in Section Two of Chapter Sixteen, Article Twenty of the Code of West Virginia, as amended.

1.02. "Air Pollutants" shall mean solids, liquids or gases which, if discharged into the air, may result in a statutory air pollution.

1.03. "Commission" shall mean the West Virginia Air Pollution Control Commission.

1.04. "Director" shall mean the Director of the West Virginia Air Pollution Control Commission.

1.05. "Person" shall mean any and all persons, natural or artificial, including any municipal, public or private corporation organized or existing under the laws of this or any other state or country, and any firm, partnership or association of whatever nature.

1.06. "Smoke" shall mean any gasborne or airborne particulate matter other than water in an uncombined form existing as a liquid or solid or combination thereof in sufficient numbers to be visible.

1.07. "Particulate Matter" shall mean any material, except uncombined water, that exists in a finely divided form as a liquid or solid.

1.08. "Ringelmann Smoke Chart" shall be the Ringelmann's Scale for Grading the Density of Smoke published by the U. S. Bureau of Mines or any chart, recorder, indicator or device which is a standardized method for the measurement of smoke density which is approved by the Commission as the equivalent of said Ringelmann Scale.

1.09. "Opacity" shall mean the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

1.10. "Direct Meat-Firing Devices" shall mean either a charbroiler or barbeque.

1.11. "Charbroiler/Barbeque" shall mean a device using the process by which meat is cooked on a grill by radiant heating while exposed to a high temperature heat source.

1.12. "Grill" shall mean a perforated framework used to broil meat. Grill areas shall be determined by the inside dimensions bordering the retaining framework.

1.13. "Odor" shall mean that property of an emission that stimulates the sense of smell.

1.14. "Owner/Operator" shall mean any person or persons, natural or artificial, including any municipal, public or private organization responsible for the operation of a direct meat-firing device.

1.15. "Affected Area" shall apply only to the Counties of Brooke, Hancock, Ohio, Marshall and Kanawha; and the Magisterial Districts of Valley (Fayette County), Scott and Pocatalico (Putnam County), Tygart (Wood County), the City of Fairmont, and those portions of Union and Winfield Magisterial Districts west of I-79 (Marion County).

Other words and phrases used in this regulation, unless otherwise indicated, shall have the meaning ascribed to them in Chapter Sixteen, Article Twenty, Section Two of the Code of West Virginia, as amended.

Section 2. Visible Emission Limitations.

2.01. No person shall cause, suffer, allow or permit emissions of smoke into the open air from any direct meat-firing device located in the affected area.

2.02. During equipment start-up, process modification or adjustment, or cleaning of control equipment, a maximum visible emission limitation of Ringelmann No. 1 or the equivalent opacity for a period not in excess of five (5) minutes in any consecutive sixty (60) minute period shall be allowed.

Section 3. Registration.

Within ninety (90) days after the effective date of this regulation, all persons owning and/or operating an existing direct meat-firing device located in the affected area shall register such source with the Commission. The information required for registration shall be determined by the Director, and shall be filed on forms to be made available by the Director.

Section 4. Delayed Compliance Order.

4.01. The owner or operator of any direct meat-firing device in an affected area which is in existence prior to the effective date of this regulation which does not meet the emission limitations of this regulation shall develop and submit to the Commission, within such time as shall be allowed by the Commission, an acceptable control program for the attaining and maintaining of the emission limitations of this regulation. The control program shall be embodied in a consent order as provided in Section Five of Chapter 16, Article 20, Paragraph 17 of the Code of West Virginia, as amended.

4.02. In the event that an owner or operator of such a plant fails to submit an acceptable control program within the time allowed, the Commission shall, by final order, determine a reasonable control program for the attaining and maintaining of the emission limitations of this regulation for such plant.

Section 5. Permits.

No person shall construct, modify or relocate any plant within the affected area without first obtaining a permit in accordance with the provisions of Section Two of Chapter 16, Article 20, Paragraph 11b of the Code of West Virginia, as amended, and Regulation XIII of this agency.

Section 6. Exemptions.

6.01. Visible emission limitations shall not apply to direct meat-firing devices having a total grill area of less than six (6) square feet.

6.02. The emission limitations of this regulation do not apply to noncommercial and home charcoal grills and/or barbeques.

Section 7. Variance.

Due to unavoidable malfunctions of equipment, emissions exceeding those provided for in this regulation may be permitted by the Commission for periods not to exceed two (2) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction or within such other time period as the Director may specify.

Section 8. Effective Date.

Regulation Series XVIII (1979) was adopted by the Commission on the 23rd day of February, 1979, and shall become effective the 1st day of May, 1979.

Regulation XXI - To Prevent and Control Air Pollution From the Emission of Volatile Organic Compounds From the Storage of Petroleum Liquids in Fixed Roof Tanks.

Section 1. Intent and Purpose.

It is the intent of the Commission that all persons engaged in the storage of petroleum liquids control the emission of volatile organic compounds from fixed roof storage tanks through the application of reasonably available control technology.

Section 2. Area Affected.

This regulation applies to sources located in West Virginia Air Quality Control Region IV (Putnam County, Kanawha County and Valley Magisterial District of Fayette County).

Section 3. Definitions.

3.01. "Air Pollution", 'statutory air pollution', shall have the meaning ascribed to it in Chapter Sixteen, Article Twenty of the Code of West Virginia, as amended.

3.02. "Approved" shall mean approved by the designated official of the West Virginia Air Pollution Control Commission.

3.03. "Commission" shall mean the West Virginia Air Pollution Control Commission.

3.04. "Condensate" shall mean hydrocarbon liquid separated from natural gas which condenses due to changes in temperature and/or pressure and remains liquid at standard conditions.

3.05. "Construction" shall mean commencement of onsite fabrication, erection, or installation of an emission source, air pollution control equipment, or a facility.

3.06. "Control device" shall mean equipment (incinerator, adsorber, or the like) used to destroy or remove air pollutant(s) prior to discharge to the ambient air.

3.07. "Crude oil" shall mean a naturally occurring mixture which consists of hydrocarbons and/or sulfur, nitrogen and/or oxygen derivatives of hydrocarbons and which is a liquid at standard conditions.

3.08. "Custody transfer" shall mean the transfer of produced crude oil and/or condensate, after processing and/or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

3.09. "Day" shall mean a 24-hour period beginning at midnight.

3.10. "Director" shall mean the Director of the West Virginia Air Pollution Control Commission.

3.11. "Emission shall mean the release or discharge, whether directly or indirectly, of any air pollutant into the ambient air from any source.

3.12. "External floating roof" shall mean a storage vessel cover in an open top tank consisting of a double deck or pontoon single deck which rests upon and is supported by the petroleum liquid being contained and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.

3.12. "Facility" shall mean any building, structure, installation, or combination thereof which contains a stationary source of air pollutant(s).

3.14. "Fixed roof tank" shall mean a cylindrical tank with a permanently affixed roof and designed to operate at or near atmospheric pressure.

3.15. "Hydrocarbon" shall mean any organic compound of carbon and hydrogen only.

3.16. "Internal floating roof" shall mean a cover or roof in a fixed roof tank which rests upon or is floated upon the petroleum liquid being contained, and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.

3.17. "Organic material" shall mean a chemical compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate.

3.18. "Owner or operator" shall mean any person who owns, leases, controls, operates or supervises a facility, an emission source, or air pollution control equipment.

3.19. "Person" shall mean any and all persons, natural or artificial, including any municipal, public or private corporation organized or existing under the laws of this or any other state or country, and any firm, partnership, or association of whatever nature.

3.20. "Petroleum liquids" shall mean crude oil, condensate, and any finished or intermediate products manufactured or extracted in a petroleum refinery.

3.21. "Petroleum refinery" shall mean any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of crude oils, or through redistillation, cracking, extraction, or reforming of unfinished petroleum derivatives.

3.22. "Reasonably available control technology" (also denoted as RACT) shall mean the lowest emission limit that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. It may require technology that has been applied to similar, but not necessarily identical, source categories.

3.23. "Standard conditions" shall mean a temperature of 20°C (68°F) and pressure of 760 millimeters of mercury (29.92 inches of mercury).

3.24. "Stationary source" shall mean any article, machine, process equipment, or other contrivance from which air pollutants emanate or are emitted, either directly or indirectly, from a fixed location.

3.25. "Storage tank" shall mean and include all fixed roof storage vessels with capacities greater than 150,000 liters (39,000 gallons) containing volatile petroleum liquids whose true vapor pressure is greater than 10.5 kilo Pascals (1.52 psia).

3.26. "True vapor pressure" shall mean the equilibrium partial pressure exerted by a petroleum liquid as determined in accordance with methods described in American Petroleum Institute Bulletin 2517, "Evaporation Loss From Floating Roof Tanks", 1962.

3.27. "Volatile organic compound" (also denoted as VOC) shall mean any compound of carbon that has a vapor pressure greater than 0.1 millimeters of mercury at standard conditions excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate.

3.28. "Vapor recovery system" shall mean a device or method that collects VOC emissions from the storage vessel (fixed roof tank) and converts them to liquid product. This includes, but is not limited to, vapor/liquid absorption, vapor compression, vapor cooling, and vapor/solid adsorption.

Section 4. Control and Prohibition of Emissions.

4.01. No owner or operator of a storage tank subject to the requirements of this regulation shall permit the use of such source unless:

(a) The source has been equipped with an internal floating roof equipped with a closure seal, or seals, to close the space between the roof edge and tank wall; or,

(b) The source has been equipped with a vapor recovery system, approved by the Commission; or,

(c) The source has been equipped with an equally effective alternative control system, approved by the Commission.

4.02. Storage tanks subject to this regulation that are equipped with a floating roof shall be maintained such that:

(a) There are no visible holes, tears, or other openings in the seal or any seal fabric or materials; and,

(b) All openings, except stub drains, are equipped with covers, lids, or seals such that:

(1) the cover, lid, or seal is in the closed position at all times except when in actual use; and,

(2) automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg; and,

(3) rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.

4.03. Storage tanks subject to this regulation that are equipped with a floating roof, a vapor recovery system, or an alternative control system shall be operated and maintained in accordance with good engineering practices.

4.04. (a) Realizing that compliance with the provisions of this Section may, in some cases, be technologically infeasible, the Commission may, upon specific application by the owner or operator of a storage tank, grant exemptions from these provisions. However, the petition must be submitted in writing in a manner approved by the Director and must contain:

(1) a detailed description of the proposed alternative operational and/or equipment controls, the magnitude of volatile organic compound emission reduction which will be achieved, and the quantity and composition of volatile organic compounds which will be emitted if the alternative operational and/or equipment controls are instituted; and,

(2) a plan, which will be instituted in addition to the proposed alternative operational and/or equipment control to reduce

volatile organic compound emissions from other source operations, not required under this regulation, such that aggregate volatile compound emissions from the facility will in no case be greater through application of the alternative control than would be permitted through conformance with Sub-Section 4.01; and,

(3) a schedule for the installation and/or institution of the alternative operational and/or equipment controls.

(b) From time to time the Commission shall review such exemptions to determine if they are still warranted. If the Commission revises or terminates an exemption, the owner or operator of the affected storage tank shall be notified by certified mail. Such revision or terminations shall not become effective for at least ninety (90) days after the receipt of notification by the owner or operator.

Section 5. Registration.

5.01. Within thirty (30) days after the effective date of this regulation, all persons owning and/or operating a storage tank subject to this regulation and not previously registered shall have registered such source(s) with the Commission. The information required for registration shall be determined and provided in the manner specified by the Director. Registration forms should be requested from the Director by the owner or operator of such source(s).

5.02. The owner or operator of a storage tank that is under construction or on which construction is initiated within thirty (30) days after the effective date of this regulation shall register such source(s) within this thirty (30) day period.

Section 6. Permits.

After the effective date of this regulation, no person shall construct or modify any storage tank subject to this regulation without first obtaining a permit for such construction or modification. Applications for permits shall be made upon forms available from the Director and shall be filed no less than ninety (90) days prior to the construction or modification. These forms shall include such information as in the judgment of the Director will enable him to determine whether such source will be so designed as to operate in conformance with the provisions of this regulation and the Code of West Virginia, and will not cause or contribute to the violation of air quality standards. Within ninety (90) days of the receipt of an application the Director shall issue or deny such permit in accordance with the provisions of Chapter Sixteen, Article Twenty, Section 11b of the Code of West Virginia, as amended, and Regulation XIII of this agency.

Section 7. Inspection, Reports, and Testing.

7.01. Storage tanks subject to the provisions of Section 4 that are equipped with a floating roof shall be subject to:

(a) routine visual inspections conducted through roof hatches once per month; and,

(b) a complete inspection of floating roof and seal which is to be conducted whenever the tank is emptied for nonoperational reasons.

7.02. Records shall be maintained for storage tanks subject to this regulation that include:

(a) reports of the results of inspections conducted under paragraphs (a) and (b) of Sub-Section 7.01; and,

(b) a record of the average monthly storage temperatures and true vapor pressures of volatile petroleum liquids stored; and,

(c) records of the throughput quantities and types of volatile petroleum liquids for each storage vessel.

7.03. At such reasonable times as the Director may designate, the owner or operator of any storage tank may be required to conduct or have conducted tests to determine the compliance of such tank with the provisions of Section 4. The Director, or his duly authorized representative, may at his option witness or conduct such tests. Should the Director exercise his option to conduct such tests, the owner or operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment to comply with generally accepted good safety practices.

7.04. The owner or operator of a storage tank may be required to maintain and submit to the Commission such records which are determined by the Director to be necessary to document the compliance of such tank with the provisions of Section 4, including, but not limited to, the records required under Sub-Section 7.02.

7.05. The Director, or his duly authorized representative, may conduct such other tests as he may deem necessary to evaluate air pollution emissions other than those noted in Section 4.

7.06. The Commission may publish, and from time to time revise, detailed test procedures and reporting instructions implementing the provisions of this regulation.

Section 8. Compliance Programs and Schedules.

8.01. In the event that a storage tank subject to this regulation and in existence prior to the adoption of this regulation does not meet the limitations of Section 4, an acceptable program to fully comply with this regulation shall be developed and offered to the Commission by the owner or operator of the storage tank. This program shall be submitted upon the request of, and within such time as shall be fixed by the Commission. Once this program has been approved by the Commission, the owner and/or operator of such storage tank shall not be in violation of this regulation so long as the approved or amended program is observed.

8.02. In the event that an owner or operator of such a storage tank fails to submit a program or an acceptable program and schedule, the Commission shall, by order, determine the compliance program and schedule.

Section 9. Variance.

If the provisions of Section 4 cannot be satisfied due to unavoidable malfunction of equipment, the Director may permit the owner or operator of a storage tank subject to this regulation to continue to use said storage tank for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the equipment malfunction. In cases of major equipment failure, additional time periods may be granted by the Commission provided a corrective program has been submitted by the owner or operator and approved by the Commission.

Section 10. Exemptions.

This regulation will not apply to storage tanks having capacities less than 1,600,000 liters (416,000 gallons) used to store produced crude oil and condensate prior to lease custody transfer.

Section 11. Effective Date.

Regulation XXI (1979) shall become effective October 27, 1979.

Regulation XXIII - To Prevent and Control Air Pollution From the Emission of Volatile Organic Compounds From Bulk Gasoline Terminals.

Section 1. Intent and Purpose.

It is the intent of the Commission that all persons engaged in the operation of bulk gasoline terminals and the appurtenant equipment necessary to load tank trucks or trailer compartments control the emission of volatile organic compounds through the application of reasonably available control technology.

Section 2. Area Affected.

This regulation applies to sources located in West Virginia Air Quality Control Region IV (Putnam County, Kanawha County and Valley Magisterial District of Fayette County).

Section 3. Definitions.

3.01. "Air Pollution", 'statutory air pollution', shall have the meaning ascribed to it in Chapter Sixteen, Article Twenty of the Code of West Virginia, as amended.

3.02. "Approved" shall mean approved by the designated official of the West Virginia Air Pollution Control Commission.

3.03. "Bulk gasoline terminal" shall mean a gasoline storage facility which receives gasoline from refineries primarily by, but not limited to, pipeline, ship, or barge, and delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by tank truck; and has a daily throughput of more than 76,000 liters (20,000 gallons) of gasoline.

3.04. "Commission" shall mean the West Virginia Air Pollution Control Commission.

3.05. "Condensate" shall mean hydrocarbon liquid which condenses due to change in temperature and/or pressure and remains liquid at standard conditions.

3.06. "Construction" shall mean commencement of onsite fabrication, erection, or installation of an emission source, air pollution control equipment, or a facility.

3.07. "Control device" shall mean equipment (incinerator, adsorber, or the like) used to destroy or remove air pollutant(s) prior to discharge of vapor to the ambient air.

3.08. "Day" shall mean a 24-hour period beginning at midnight.

3.09. "Director" shall mean the Director of the West Virginia Air Pollution Control Commission.

3.10. "Emission" shall mean the release or discharge, whether directly or indirectly, of any air pollutant into the ambient air from any source.

3.11. "Facility" shall mean any building, structure, installation, or combination thereof which contains a stationary source of air pollutants.

3.12. "Gasoline" shall mean a petroleum distillate having a Reid vapor pressure of 27.6 kPa (4 pounds/square inch) or greater.

3.13. "Hydrocarbon" shall mean any organic compound of carbon and hydrogen only.

3.14. "Organic material" means a chemical compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate.

3.15. "Owner or operator" shall mean any person who owns, leases, controls, operates or supervises a facility, an emission source, or air pollution control equipment.

3.16. "Person" shall mean any and all persons, natural or artificial, including any municipal, public or private corporation organized or existing under the laws of this or any other state or country, and any firm, partnership, or association of whatever nature.

3.17. "Reasonably available control technology" (also denoted as RACT) shall mean the lowest emission limit that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. It may require technology that has been applied to similar, but not necessarily identical, source categories.

3.18. "Reid vapor pressure" shall mean the absolute pressure of volatile crude oil and volatile nonviscous petroleum liquids except liquified petroleum gases as determined by American Society for Testing and Materials, Part 17, 1973, D-323-72 (Re-approved 1977).

3.19. "Standard conditions" shall mean a temperature of 20°C (68°F) and pressure of 760 millimeters of mercury (29.92 inches of mercury).

3.20. "Vapor collection system" shall mean a vapor transport system which uses direct displacement by the liquid loaded to force vapors from the tank into a vapor control system.

3.21. "Vapor control system" shall mean a system that prevents release to the atmosphere of organic material in the vapors displaced from a tank.

3.22. "Volatile organic compound" (also denoted as VOC) shall mean any compound of carbon that has a vapor pressure greater than 0.1 millimeters of mercury at standard conditions excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. For the purpose of this regulation, methane shall not be considered a volatile organic compound.

Section 4. Control and Prohibition of Emissions.

4.01. No owner or operator of a bulk gasoline terminal subject to this regulation may cause, allow or permit mass emissions of volatile organic compounds from the loading of gasoline into any tank trucks or trailers to exceed 80 milligrams per liter of gasoline loaded.

4.02. The emission limit under Sub-Section 4.01 shall be achieved by:

(a) equipping the bulk gasoline terminal with a vapor control system, capable of complying with Sub-Section 4.01, properly installed, in good working order, in operation and consisting of one of the following:

(1) an adsorption, absorption, compression or condensation system which processes and recovers vapors and gases from the equipment being controlled; or;

(2) a vapor collection system which directs all vapors to a fuel gas system; or,

(3) an equally effective alternative control system approved by the Commission; and,

(b) venting all displaced vapors and gases only to the vapor control system; and,

(c) providing a means to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected; and,

(d) equipping all loading and vapor lines with fittings which make vapor-tight connections which close automatically when disconnected.

4.03. Sources subject to this regulation may not:

(a) allow gasoline to be discharged in sewers or stored in open containers or handled in any manner that would result in evaporation; nor,

(b) allow the pressure in the vapor collection system to exceed the tank truck or trailer pressure relief settings.

4.04. (a) Realizing that compliance with the provisions of this section may, in some cases, be technologically infeasible, the Commission may, upon specific application by the owner or operator of a bulk gasoline terminal, grant exemptions from these provisions. However, the petition must be submitted in writing in a manner approved by the Director and must contain:

(1) a detailed description of the proposed alternative operational and/or equipment controls, the magnitude of volatile organic compound emission reduction which will be achieved, and the quantity and composition of volatile organic compounds which will be emitted if the alternative operational and/or equipment controls are instituted; and,

(2) a plan, which will be instituted in addition to the proposed alternative operational and/or equipment controls, to reduce volatile organic compound emissions from other source operations, not required under this regulation, such that aggregate volatile organic compound emissions from the facility

will in no case be greater through application of the alternative control than would be permitted through conformance with Section 4; and

(3) a schedule for the installation and/or institution of the alternative operational and/or equipment controls.

(b) From time to time the Commission shall review such exemptions to determine if they are still warranted. If the Commission revises or terminates an exemption, the owner or operator of the affected bulk gasoline terminal shall be notified by certified mail. Such revision or terminations shall not become effective for at least ninety (90) days after the receipt of notification by the owner or operator.

Section 5. Registration.

5.01. Within thirty (30) days after the effective date of this regulation all persons owning and/or operating a bulk gasoline terminal subject to this regulation and not previously registered shall have registered such source(s) with the Commission. The information required for registration shall be determined and provided in the manner specified by the Director. Registration forms should be requested from the Director by the owner or operator of such source(s).

5.02. The owner or operator of a bulk gasoline office that is under construction or on which construction is initiated within thirty (30) days after the effective date of this regulation shall register such source(s) with the Commission.

Section 6. Permits.

After the effective date of this regulation, no person shall construct or modify any bulk gasoline terminal subject to this regulation without first obtaining a permit for such construction or modification. Applications for permits shall be made upon forms available from the Director and shall be filed no less than ninety (90) days prior to the construction or modification. These forms shall include such information as in the judgment of the Director will enable him to determine whether such source will be so designed as to operate in conformance with the provisions of this regulation and the Code of West Virginia, and will not cause or contribute to the violation of air quality standards. Within ninety (90) days of the receipt of an application the Director shall issue or deny such permit in accordance with the provisions of Chapter 16, Article 20, Section 11b of the Code of West Virginia, as amended, and Regulation XIII of this agency.

Section 7. Reports and Testing.

7.01. At such reasonable times as the Director may designate, the owner or operator of any bulk gasoline terminal(s) may be required to conduct or have conducted tests to determine the compliance of such terminal(s) with the limitations of Section 4. The Director, or his duly authorized representative, may at his option witness or conduct such tests. Should the Director exercise his option to conduct such tests, the owner or operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment to comply with generally accepted good safety practices.

7.02. For the purpose of determining the emissions from systems installed to control volatile organic compound vapors resulting from loading operations at bulk gasoline terminals, the following procedures shall be included:

(a) In a manner approved by the Director, direct measurements shall be made to determine the hydrocarbon mass exhausted from the vapor control system.

(b) In a manner approved by the Director, all possible sources of leaks shall be qualitatively checked to ensure that no uncontrolled vapors are emitted to the atmosphere.

7.03. For the purpose of determining the efficiency of a volatile organic compound emission control system, the following procedure shall be included:

(a) The material containing volatile organic compounds shall be sampled and analyzed in a manner approved by the Director such that the quantity of emissions that could result from the use of the material can be quantified.

(b) The efficiency of any capture system used to transport the volatile organic compound emissions from their point of origination to the control equipment shall be computed using accepted engineering practices and in a manner approved by the Director.

(c) Samples of the volatile organic compound containing gas stream shall be taken simultaneously at the inlet and outlet of the emissions control device in a manner approved by the Director.

(d) The total combustible carbon content of the samples shall be determined by a method approved by the Director.

(e) The efficiency of the control device shall be expressed as a fraction of total combustible carbon content reduction achieved.

(f) The volatile organic compound mass emission rate shall be the sum of emissions from the control device, emissions not collected by the capture system and capture system losses.

7.04. The Director, or his duly authorized representative, may conduct such other tests as he may deem necessary to evaluate air pollution emissions other than those noted in Section 4.

7.05. The Commission may publish, and from time to time revise, detailed test procedures and reporting instructions implementing the provisions of this regulation.

Section 8. Compliance Programs and Schedules.

8.01. In the event that a bulk gasoline terminal subject to this regulation and in existence prior to the adoption of this regulation does not meet the limitations set forth in Section 4, an acceptable program to fully comply with this regulation shall be developed and offered to the Commission by the person responsible for the source. This program shall be submitted upon the request of, and within such time as shall be fixed by the Commission. Once this program has been approved by the Commission, the owner and/or operator of such installation shall not be in violation of this regulation so long as the approved or amended program is observed.

8.02. In the event that an owner or operator of such a source(s) of volatile organic compounds fails to submit a program or an acceptable program and schedule, the Commission shall, by order, determine the compliance program and schedule.

Section 9. Variance.

If the provisions of Section 4 cannot be satisfied due to unavoidable malfunction of equipment, the Director may permit the owner or operator of a bulk gasoline terminal subject to this regulation to continue to operate for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the equipment malfunction. In cases of major equipment failure, additional time periods may be granted by the Commission provided a corrective program has been submitted by the owner or operator and approved by the Commission.

Section 10. Exemptions.

Sources subject to this regulation whose emissions of volatile organic compounds are not more than 6.8 kilograms (15 pounds) in any one (1) day, nor more than 1.4 kilograms (3 pounds) in any one (1) hour will be exempt from Sections 4 through 9, provided the emission rates are determined and certified six (6) months after the effective date of this regulation in a manner approved by the Director.

Section 11. Effective Date.

Regulation XXIII (1979) shall become effective October 27, 1979.

Regulation XXIV - To Prevent and Control Air Pollution From the Emission of Volatile Organic Compounds From Petroleum Refinery Sources.

Section 1. Intent and Purpose.

It is the intent of the Commission that all persons engaged in the operation of vacuum producing systems, wastewater separators, and process unit turnarounds at petroleum refining sources control the emission of volatile organic compounds through the application of reasonably available control technology.

Section 2. Area Affected.

This regulation applies to sources located in West Virginia Air Quality Control Region IV (Putnam County, Kanawha County and Valley Magisterial District of Fayette County).

Section 3. Definitions.

3.01. "Accumulator" shall mean the reservoir of a condensing unit receiving the condensate from the condenser.

3.02. "Air Pollution", 'statutory air pollution', shall have the meaning ascribed to it in Chapter Sixteen, Article Twenty of the Code of West Virginia, as amended.

3.03. "Approved" shall mean approved by the designated official of the West Virginia Air Pollution Control Commission.

3.04. "Commission" shall mean the West Virginia Air Pollution Control Commission.

3.05. "Condensate" shall mean hydrocarbon liquid separated from natural gas which condenses due to changes in temperature and/or pressure and remains liquid at standard conditions.

3.06. "Condenser" shall mean any heat transfer device used to liquefy vapors by removing their latent heats of vaporization. Such devices include, but are not limited to, shell and tube, coil, surface, or contact condensers.

3.07. "Construction" shall mean commencement of onsite fabrication, erection, or installation of an emission source, air pollution control equipment, or a facility.

3.08. "Control device" shall mean equipment (incinerator, adsorber, or the like) used to destroy or remove air pollutant(s) prior to discharge to the ambient air.

3.09. "Day" shall mean a 24-hour period beginning at midnight.

3.10. "Director" shall mean the Director of the West Virginia Air Pollution Control Commission.

3.11. "Emission" shall mean the release or discharge, whether directly or indirectly, of any air pollutant into the ambient air from any source.

3.12. "Facility" shall mean any building, structure, installation, or combination thereof which contains a stationary source of air pollutants.

3.13. "Firebox" shall mean the chamber or compartment of a boiler or furnace in which materials are burned but does not mean the combustion chamber of an incinerator.

3.14. "Forebays" shall mean the primary sections of a wastewater separator.

3.15. "Hot well" shall mean the reservoir of a condensing unit receiving the warm condensate from the condenser.

3.16. "Hydrocarbon" shall mean any organic compound of carbon and hydrogen only.

3.17. "Organic material" shall mean a chemical compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate.

3.18. "Owner or operator" shall mean any person who owns, leases, controls, operates or supervises a facility, an emission source, or air pollution control equipment.

3.19. "Person" shall mean any and all persons, natural or artificial, including any municipal, public or private corporation organized or existing under the laws of this or any other state or country, and any firm, partnership, or association of whatever nature.

3.20. "Petroleum liquids" shall mean crude oil, condensate, and any finished or intermediate products manufactured or extracted in a petroleum refinery.

3.21. "Petroleum refinery" shall mean any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation, cracking, extraction, or reforming of unfinished petroleum derivatives.

3.22. "Petroleum refinery source" shall mean and include vacuum producing systems, wastewater separators, and processing units at petroleum refineries.

3.23. "Reasonably available control technology" (also denoted as RACT) shall mean the lowest emission limit that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. It may require technology that has been applied to similar, but not necessarily identical, source categories.

3.24. "Refinery fuel gas" shall mean any gas which is generated by a petroleum refinery process unit and which is combusted, including any gaseous mixture of natural gas and fuel gas.

3.25. "Standard conditions" shall mean a temperature of 20°C (68°F) and pressure of 760 millimeters of mercury (29.92 inches of mercury).

3.26. "Turnaround" shall mean the procedure of shutting a refinery unit down after a run to do necessary maintenance and repair work and putting the unit back on stream.

3.27. "Vacuum producing system" shall mean any reciprocating, rotary, or centrifugal blower or compressor, or any jet ejector or device that takes suction from a pressure below atmospheric and discharges against atmospheric pressure.

3.28. "Vapor control system" shall mean a system that prevents release to the atmosphere of organic material emitted during the operation of any transfer, storage, or process equipment.

3.29. "Volatile organic compound" (also denoted as VOC) shall mean any compound of carbon that has a vapor pressure greater than 0.1 millimeters of mercury at standard conditions excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, or carbonates, and ammonium carbonate.

3.30. "Wastewater (oil/water) separator" shall mean any device or piece of equipment, other than a treatment lagoon, which utilizes the difference in density between oil and water to remove oil and associated chemicals from water, or any device, such as a flocculation tank, clarifier, etc., which removes petroleum derived compounds from waste water.

Section 4. Control and Prevention of Emissions.

4.01. (a) The owner or operator of a petroleum refinery with any vacuum producing systems may not permit the emission of any noncondensable volatile organic compounds from the condensers, hot wells or accumulators of the system.

(b) The emission limit under paragraph (a) of this Sub-Section shall be achieved by:

(1) piping the noncondensable vapors to a firebox or incinerator; or,

(2) compressing the vapors and adding them to the refinery fuel gas; or,

(3) installing an equally effective alternative control system, approved by the Commission.

4.02. The owner or operator of a petroleum refinery with any waste-water (oil/water) separators shall:

(a) Provide covers or seals approved by the Director on all separators and forebays, and equip all openings in covers, separators, and forebays with lids or seals such that the lids or seals are in the closed position at all times except when in actual use; or,

(b) Install an equally effective alternative control system approved by the Commission.

4.03. The owner or operator of a petroleum refinery shall minimize and record VOC emissions during process unit turnarounds by:

(a) Depressurization venting of the process unit or vessel to a vapor control system, flare or firebox; and,

(b) Preventing emissions of volatile organic compounds from a process unit or vessel unless its internal pressure is 136 kilo Pascals (19.7 psia) or less; and

(c) Recordkeeping of the following items:

(1) every date that each process unit or vessel is shut down; and,

(2) the approximate vessel volatile organic compound concentration when the volatile organic compounds were discharged to the atmosphere; and,

(3) the approximate total quantity of volatile organic compounds emitted to the atmosphere.

4.04. (a) Realizing that compliance with the provisions of this Section may, in some cases, be technologically infeasible, the Commission may, upon specific application by the owner or operator of a petroleum refinery source, grant exemptions from these provisions. However, the petition must be submitted in writing in a manner approved by the Director and must contain:

(1) a detailed description of the proposed alternative operational and/or equipment controls, the magnitude of volatile organic compound emission reduction which will be achieved, and the quantity and composition of volatile organic compounds which will be emitted if the alternative operational and/or equipment controls are instituted; and,

(2) a plan, which will be instituted in addition to the proposed alternative operational and/or equipment controls, to reduce

volatile organic compound emissions from other source operations, not required under this regulation, such that aggregate volatile organic compound emissions from the facility will in no case be greater through application of the alternative control than would be permitted through conformance with this Section; and,

(3) a schedule for the installation and/or institution of the alternative operational and/or equipment controls.

(b) From time to time the Commission shall review such exemptions to determine if they are still warranted. If the Commission revises or terminates an exemption, the owner or operator of the affected petroleum refinery source shall be notified by certified mail. Such revision or terminations shall not become effective for at least ninety (90) days after the receipt of notification by the owner or operator.

Section 5. Registration.

5.01. Within thirty (30) days after the effective date of this regulation all persons owning and/or operating a petroleum refinery source(s) subject to this regulation and not previously registered shall have registered such source(s) with the Commission. The information required for registration shall be determined and provided in the manner specified by the Director. Registration forms should be requested from the Director by the owner or operator of such source(s).

5.02. The owner or operator of such a petroleum refinery source that is under construction or on which construction is initiated within thirty (30) days after the effective date of this regulation shall register such source(s) within this thirty (30) day period.

Section 6. Permits.

After the effective date of this regulation, no person shall construct or modify any petroleum refinery source subject to this regulation without first obtaining a permit for such construction or modification. Applications for permits shall be made upon forms available from the Director and shall be filed no less than ninety (90) days prior to the construction or modification. These forms shall include such information as in the judgment of the Director will enable him to determine whether such source will be so designed as to operate in conformance with the provisions of this regulation and the Code of West Virginia, and will not cause or contribute to the violation of air quality standards. Within ninety (90) days of the receipt of an application the Director shall issue or deny such permit in accordance with the provisions of Chapter Sixteen, Article Twenty, Section 11b of the Code of West Virginia, as amended, and Regulation XIII of this agency.

Section 7. Reports and Testing.

7.01. At such reasonable times as the Director may designate, the owner or operator of any petroleum refinery source subject to this regulation may be required to conduct or have conducted tests to determine the compliance of such source(s) with the limitations of Section 4. The Director, or his duly authorized representative, may at his option witness or conduct such tests. Should the Director exercise his option to conduct such tests, the owner or operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment to comply with generally accepted good safety practices.

7.02. The Director, or his duly authorized representative, may conduct such other tests as he may deem necessary to evaluate air pollution emissions other than those noted in Section 4.

7.03. The Commission may publish, and from time to time revise, detailed test procedures and reporting instructions implementing the provisions of this regulation.

Section 8. Compliance Programs and Schedules.

8.01. In the event that a petroleum refinery having a source(s) of volatile organic compounds subject to this regulation and in existence prior to the adoption of this regulation does not meet the limitations of Section 4, an acceptable program to fully comply with this regulation shall be developed and offered to the Commission by the person responsible for said source. This program shall be submitted upon the request of, and within such time as shall be fixed by the Commission. The owner and/or operator of such source shall not be in violation of this regulation so long as the approved or amended program is observed.

8.02. In the event that an owner or operator of a petroleum refinery having such source(s) of volatile organic compounds fails to submit a program or an acceptable program and schedule, the Commission shall, by order, determine the compliance program and schedule.

Section 9. Variance.

If the provisions of Section 4 cannot be satisfied due to unavoidable malfunction of equipment, the Director may permit the owner or operator of a petroleum refinery source subject to this regulation to continue to operate said source for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the equipment malfunction. In cases of major equipment failure, additional time periods may be granted by the Commission provided a corrective program has been submitted by the owner or operator and approved by the Commission.

Section 10. Effective Date.

Regulation XXIV shall become effective October 27, 1979.